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ABSTRACT

The mentoring of youth by adults has been identified as one of the more promising program approaches to promoting positive youth outcomes. This synthesis examines the role that mentoring plays in helping youth develop a broad array of strengths and capacities related to: (1) education and cognitive attainment; (2) health and safety; (3) social and emotional well-being; and (4) self-sufficiency. The synthesis describes five mentoring programs that have undergone an experimental evaluation, three programs with non-experimental evaluations, and two quasi-experimental programs. Many of the programs featured mentoring as a component of a comprehensive evaluation, with mentors often recruited from the community and mentored children always at-risk youth. Overall, youth participating in mentoring relationships improved on some educational measures. Mentoring showed promise in helping youth develop healthy and safe behaviors. Mentoring indirectly improved a number of social and behavioral outcomes. However, the impact of mentoring programs on young adult self-sufficiency has not been well researched. Program practices and participant characteristics associated with positive and negative youth outcomes are suggested. The synthesis identifies additional research needs, including the need to compare impact of different program components, models of mentoring relationships, and participant characteristics. Two appendices describe youth mentoring programs and their evaluation studies, and delineate program components offered in addition to mentoring. (Contains 38 references.) (KB)

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MENTORING PROGRAMS AND YOUTH DEVELOPMENT: A SYNTHESIS

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Child Trends

Washington, D.C.

January 2002

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MENTORING PROGRAMS AND YOUTH DEVELOPMENT: A SYNTHESIS

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EXECUTIVE SUMMARY

Children need positive relationships with caring adults. Parents generally fill this central need, but many children benefit from relationships with other adults to supplement—or in some cases, substitute for— relationships with their parents. Therefore, the mentoring of youth by adults is one of the more promising program approaches intended to promote positive youth outcomes. The mid- to late 1980s saw the number of mentoring programs grow as the need for caring relationships between at-risk youth and adults became more obvious, and the shortcomings of some traditional programs and services for young people became more apparent.

This synthesis examines the role that mentoring plays in helping youth develop a broad array of strengths and capacities in the following three domains of child well-being: education and cognitive attainment; health and safety; and social and emotional well-being. It is also worthwhile to consider the influence of mentoring on a fourth domain, self-sufficiency, as youth age into the early adult years. This report seeks to answer the following questions: What do mentoring programs look like? How do mentoring programs contribute to youth development (i.e., what resources do mentoring programs provide that support youth development)? What youth outcomes can we realistically expect mentoring programs to achieve? What are the characteristics of effective mentoring?

The programs in this report have all undergone evaluation. Our main goal is to include program evaluations that use a rigorous experimental methodology to test for the impact of program participation on youth outcomes. Those with rigorous experimental evaluations provide evidence that mentoring can lead to positive development. For our examination of the program elements associated with positive outcomes, we turn to both experimental and non-experimental studies. The experimentally evaluated programs referred to in this report are: Across Ages, Big Brothers/Big Sisters, The Buddy System, Building Essential Life Options Through New Goals (BELONG), and Career Beginnings. The non-experimental studies are: Campus Partners in Learning, Hospital Youth Mentoring Program, and Linking Lifetimes. Two additional programs are quasi-experimental: Raising Ambition Instills Self-Esteem (RAISE) and Sponsor-A-Scholar.

I. General Description of Mentoring Programs

Many of the rigorously evaluated programs have this in common: Mentoring is one component of a comprehensive intervention. Warm and close relationships with caring adults, supervision, and positive role models are the common resources and investments — or "inputs" —that mentoring interventions contribute to youth development. However, programs have varying components that also contribute to youth development, such as life skills training, academic tutoring, financial aid for college, and a community service requirement.

Mentors are often recruited from the community. Mentees are always at-risk youth. In accordance with "best practices," the evaluated programs all provide training and

support for the mentoring relationship. Activities can be structured or unstructured, and revolve around both academic and social events. Most programs have guidelines for the expected frequency of mentor-mentee contact.

II. Youth Outcomes Associated with Mentoring Programs

Overall, youth participating in mentoring relationships improved on some important educational measures. Program evaluations consistently show that youth participating in mentoring programs have fewer unexcused absences from school than do similar youth not participating in mentoring programs. Youth participating in mentoring programs also had better attitudes and behaviors at school and have better chances of attending college. Further evaluation is needed to confirm whether mentoring improves grades.

Mentoring shows promise in helping youth develop healthy and safe behaviors. Compared with non-participants, youth who participate in programs that include mentoring have less drug and alcohol use (especially among minority youth) and – in some but not all studies -- fewer delinquent behaviors.

Mentoring improves a number of social and behavioral outcomes, although the effects are sometimes indirect. It is not clear from the research that mentoring improves young people's perception of their worth. However, research suggests that youth improve in this outcome because mentoring improves parental relationships, which improves youths' self-worth. In addition to experiencing improved relationships with parents, youth participating in mentoring had more emotional support from peers and more positive attitudes toward their elders and toward helping others.

The impact of mentoring programs on young adult self-sufficiency has not been well researched. The only study that addressed the effect of mentoring on young adult self-sufficiency shows that both youth who participated in a program with mentoring and those who did not have similar levels of employment and "productive activity" one year after high school (possibly due to higher percentages of experimental youth attending post-secondary education).

III. Implementation Characteristics that Promote or Weaken the Effectiveness of Mentoring Approach

Program practices and participant characteristics associated with youth outcomes.

Non-experimental analyses, while not as definitive as experimental evaluations, offer insights about program practices and characteristics associated with positive outcomes. Generally, significant positive effects of mentoring increase with relationship duration, with best results for relationships lasting more than 12 months. Short-lived relationships, on the other hand, have the potential to harm children. Other characteristics associated with better youth outcomes include: frequent contact, youth-centered mentor-mentee relationships, and the mentee's positive perception of the

mentoring relationship. Cross-race matches are as successful as same-race matches. Finally, mentees who are the most disadvantaged or at-risk are especially likely to gain from mentoring programs.

Characteristics shaping longer-lasting or higher quality relationships. Regrettably, few studies use an experimental design to evaluate which program characteristics result in quality mentor-mentee relationships. However, evidence from less rigorous research methods indicate that the following program characteristics may promote higher-quality mentoring relationships: structure and planning, pre-match training, post-match training and support, supervision of the match, consideration of mentor/mentee interests in the matching process, social and academic activities (especially social, as such activities apparently help build trust), and adopting a youth-driven or "developmental" approach to the relationship. Cross-race matching appears to produce quality relationships as effectively as same-race matching.

IV. Unanswered Questions.

A number of well-designed program evaluations indicate that mentoring programs are beneficial to at-risk youth. Given accumulating evidence about the effectiveness of these programs, as well as the current widespread interest in initiating mentoring programs, further research in several areas would be particularly helpful to those seeking to implement such programs.

First, we need research that evaluates and compares variations in mentoring programs. Many of the programs reviewed here target adolescent youth for one-on-one mentoring as one of a variety of program supports. It would be useful to compare the impacts of different program components, models of mentoring relationships, and characteristics of participants, using an experimental design.

Second, we need to understand which program practices encourage adults to volunteer as mentors and to be effective mentors. We have learned that effective mentoring makes great demands on mentors and program structure. Effective mentors commit to a long-term mentoring relationship, have frequent and regular contact with their mentees, and participate in ongoing training and communication with program directors. Some potential mentors – college students, for example – may have difficulty meeting these requirements. Worthwhile mentors from the community may turn away from the time commitment of effective mentoring. *Should we simply discount these groups as a source of mentors?* Can we apply the "best practices" concepts learned thus far to research the trade-offs and benefits of different program practices? Could increased program structure or more frequent meetings supplement short-term mentoring relationships to compensate for their brevity? We have yet to learn the answers to these questions.

Finally, this mentoring synthesis identifies program practices that are associated with positive youth outcomes and quality mentoring relationships, but it also raises additional questions related to youth outcomes. Rigorous research exploring the measurement of

quality mentoring and standards for best practices, the cost of mentoring programs, and the amount of training and on-going support of mentors necessary to achieve good outcomes can provide a host of practical suggestions and guidance to mentoring programs and their volunteers.

MENTORING PROGRAMS AND YOUTH DEVELOPMENT: A SYNTHESIS

INTRODUCTION

Children need positive relations with caring adults. Parents often fill this central need, but many children benefit from relationships with other adults in addition to their parents. Therefore, the mentoring of youth by adults stands alongside the many program approaches that are expected to promote positive youth outcomes. This synthesis places mentoring within the context of a general model of youth development (see Figure 1).

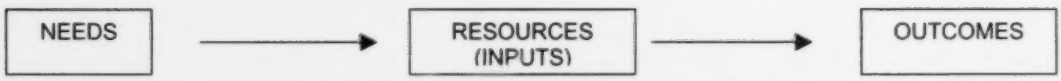

Figure 1. General Model of Youth Development

What makes mentoring a potential policy approach to promoting good school outcomes, reducing drug and alcohol use, promoting self-esteem, and helping youth develop into healthy and successful adults? The foundation of this approach is that if caring, concerned adults are available to young people, these young people will more likely become successful adults themselves (Scales and Leffert, 1999; Furstenberg, 1993; Rutter, 1987). Coleman's (1988) theory suggests that, besides financial investments, parents have human capital – cognitive skills and experience (such as educational and employment experience) – that they can invest in their children. When parents are involved in their children's lives and have established strong bonds of trust and affection (or "social capital"), this creates a legacy of human capital skills that one generation passes on to the next.

Although positive sustained relationships with parents represent a critical resource for children, other adults can provide support similar to that of a parent. This support from a non-parental adult can either supplement what a parent provides or substitute for support that a parent refuses or is unable to give. In general, such support includes instrumental support (provision of basic needs such as financial support), emotional regulation, esteem enhancement, cognitive appraisal, and emotional support (Munsch and Blyth, 1993). Non-parental adults can act as teachers and role models, and often support and enable youth in various endeavors (Hendry, Roberts, Glendinning, and Coleman, 1992). Through supportive or "successful" relationships with non-parental adults, adolescents can receive emotional support, advice, and guidance about subjects they might not feel comfortable discussing with their parents (Allen, Aber, and Leadbeater, 1990).

Social support from non-parental adults seems to protect a child from participating in many risky behaviors. The social capital that youth accrue from social support and close emotional ties with adults in the community operate to protect these youth from substance use, violence, and delinquency (Harris and Ryan, 2000). Perhaps the single

most important protective factor for development among at-risk children is a positive relationship with at least one caring adult (Scales and Gibson, 1996). Indeed, research has found that high-risk youth who establish ties with a supportive adult in addition to their parents were significantly more likely to develop into competent and autonomous young adults (Rhodes, Ebert, and Fischer, 1992, p. 445).

Why is mentoring needed? There are at least three reasons. First, some features of contemporary society limit young people's access to adults: the growing isolation of many youth in poor communities; high rates of divorce and single parenting; and, in some communities, few institutions and activities to support youth and their families. Second, youth who experienced unsatisfactory or rejecting parental relationships may develop fears and doubts about whether others will accept and support them – fears and doubts that a successful mentoring experience might allay (Bowlby, 1982). Finally, even youth with strong positive parental relationships experience the typical "stress and storm" of adolescence and may potentially benefit from the support of another caring, concerned adult.

The research on youth development therefore poses a series of specific and practical questions: What do youth need? How do we meet those needs? And what outcomes can society realistically expect to achieve? Figure 2 explores these questions in a model of youth development. Table 1 then provides examples of resources and inputs provided by mentoring programs, relative to the needs and inputs we identify as important for development.

Figure 2. Model of Youth Development Highlighting Needs, Inputs and Outcomes

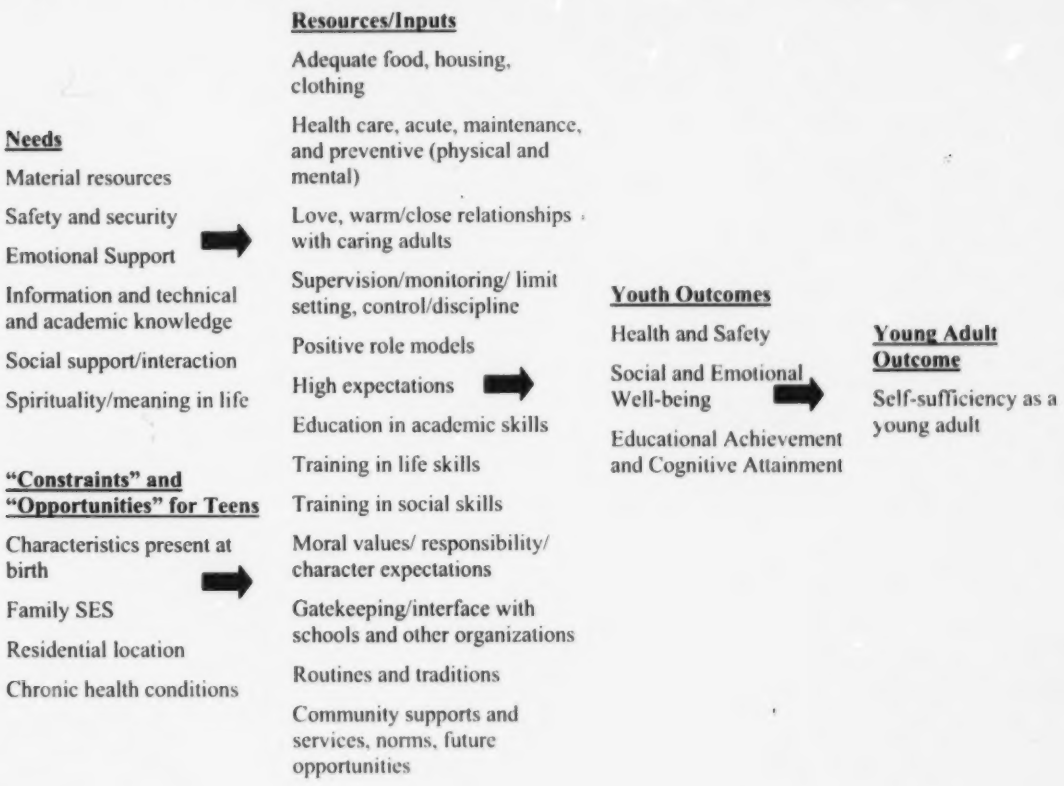

Table 1. Resources/Inputs Provided Through Mentoring Programs

Resources/Inputs Categories	Resources/Inputs from mentoring programs
Adequate food, housing clothing	N/A
Health care, acute and preventative (physical and mental)	N/A
Love, warm/close relationships with caring adults	• Mentor-mentee relationship, especially when developmental' in nature
Supervision/monitoring/limit setting, control/discipline	• Mentor instructions to follow-up regularly with mentee, including phone contact • Student advocate (can be separate from mentor) monitors attendance, grades, and behavior
Positive role models	• Inherent in the mentor-mentee relationship • Setting in hospital and activities in hospital allow mentee to have examples of careers and work ethic • Recruiting older (55+) mentors • Parenting workshops for the parents of youth
High expectations	• Having very high expectations may not be a good thing; trust is more important
Education in academic skills	• Tutoring • Academic workshops • College preparation
Training in life-skills	• Life-skills curriculum • Workshops on practical issues, such as pregnancy education
Training in social skills	• Life-skills curriculum • Team building training
Moral values/responsibility/character	• Youth-centered approach may also encourage youth character • Community service requirement
Gatekeeping/interface with schools and other organizations	• Student advocates employed in the school
Routines and traditions	N/A
Community supports and services, norms, future opportunities	• Financial support for college • Place-based career programs offer connections to jobs at place (e.g., hospital based program is link to nursing, doctoring professions) • When local businesses fund programs, they may also provide jobs, i.e. summer jobs

This synthesis is organized into three parts. First, we describe the approaches taken by mentoring programs. We then summarize across the programs and studies those youth outcomes demonstrated to be associated with participation in mentoring programs. Third, we highlight program elements that contribute to effective mentoring.

The programs we include in this report have all undergone evaluation. Our main goal is to include program evaluations that use a rigorous experimental methodology to test for the impact of program participation on youth outcomes. The experimental evaluations provide evidence of the impact of mentoring in promoting positive youth development. Our conclusions about effective program approaches, however, are generally based on quasi-experimental evaluations and non-experimental analyses.

Programs evaluated by experimental methods are:

- Across Ages
- Big Brothers/Big Sisters (BB/BS)
- The Buddy System
- Building Essential Life Options Through New Goals (BELONG)
- Career Beginnings

Programs evaluated by non-experimental methods are:

- Campus Partners in Learning (CPIL)
- Hospital Youth Mentoring (HYMP)
- Linking Lifetimes

Programs evaluated by quasi-experimental methods are:

- Raising Ambition Instills Self-Esteem (RAISE)
- Sponsor-A-Scholar (SAS)

These programs and evaluations are described in detail in Appendix A.

PART I. MENTORING PROGRAMS: GENERAL DESCRIPTION

This section provides a general description of mentoring as a means of promoting positive youth outcomes. Throughout, we offer examples from the programs we reviewed. The program characteristics are summarized in Table 2 at the end of this section. When programs are employed over multiple sites, the details of the program characteristics may vary substantially by site, and this is also noted in Table 2.

Mentoring is an approach that has been used to address many program goals. For example, Big Brothers/Big Sisters is a one-on-one mentoring program in which mentoring pairs set an individualized goal that often falls into the following categories: improving parent-child and peer relationships, improving self-esteem, reducing antisocial behaviors, and promoting academic achievement. Other programs are more narrowly aimed at improving academic outcomes and helping youth stay in school (Project BELONG, Sponsor-a-Scholar, the Hospital Youth Mentoring Program); preparing youth for future employment and education (Career Beginnings); or reducing antisocial behaviors such as substance abuse (Across Ages, Buddy System). The Linking Lifetimes program has a general goal of using older mentors to help at-risk youth and young offenders become productive and self-reliant members of society. Part II of this review provides evidence that mentoring programs have been successful in addressing many of these goals.

We consider many of the mentoring programs reviewed here to be community-based, rather than school-based, programs. Unlike the latter, which meet only during regularly scheduled sessions at schools, in community-based mentoring, "youth and mentors decide between themselves when and where to meet."[MP2] BB/BS is an example of a community-based mentoring program – mentors and mentees make their own arrangements for activities, within guidelines distributed by the organization. In other organizations, one-on-one mentoring may be one component of a comprehensive intervention. The Across Ages program uses intergenerational mentoring as one strategy toward its goal of drug prevention for high-risk middle school students. Other components of this program include involvement of the youth in community service, a classroom-based life-skills curriculum, and workshops for parents.

Who are the mentees? Not surprisingly, all the programs described in the evaluation literature target an at-risk youth population. "At-risk" can be defined in a number of ways: Most of the youth served by BB/BS come from poor families and single-parent families; RAISE focuses on children from elementary schools in impoverished neighborhoods; Linking Lifetimes serves young offenders and teen mothers; and the SAS program is open to motivated, low-income students with average grades.

Targeted youth range from about fourth grade through high school. Ages may vary even within a program. Both SAS and RAISE target youth for long-term intervention. The RAISE program targets children in the sixth grade, and follows them for six or seven years through middle school and high school (although mentors were only asked to commit to a minimum of one year). SAS, with goals of keeping youth in school and fostering college participation, targets youth in the ninth grade and follows them through the first year of college. The average mentor relationship in this program lasted just under 4 years. Big Brothers/Big Sisters' one-on-one mentoring is open to children 5–18 years old, although the children included in the impact study of this program were 10–16 years old.

Who are the mentors? Mentors are recruited in a variety of ways. The Big Brothers/Big Sisters program takes applications from volunteers in the community, and subjects each

application to an intensive screening process. The Buddy System program also recruits (and pays a small stipend to) mentors from the community. In the Hospital Youth Mentoring Program, mentors are employees at the hospitals sponsoring the program. Across Ages and Linking Lifetimes make a special effort to recruit older members of the community (ages 55+) to mentor youth. The Campus Partners in Learning program and Project BELONG recruit college students to be mentors, with the goals of benefiting both the youth and the college student mentor. Most programs also screen mentors, both for safety and to assure successful matching to children.

How often do mentor and mentees meet? The programs ask the mentors to make a specific commitment to meeting with youth. Seventy percent of the mentors in BB/BS meet with their "littles" at least three times a week.[BBS1] Mentors in the RAISE program meet once a week, but are expected to maintain phone contact more frequently. In the shortest-term program (one school year), mentors in Across Ages meet twice a week with their mentees during that school year.

What do they do together? Youth participate in both structured and unstructured activities with their mentors. In BB/BS, youth and their mentors decide together where they will meet and what they will do together. Activities are often either social (eating a meal together, attending a sporting event), or academic (helping with homework). The mentoring activities in Across Ages are also mostly unstructured. Other programs may supplement unstructured meetings with planned activities that the mentor and mentee can attend with other pairs (CPIL, HYMP). Programs that focus on educational and career development tend to offer very structured activities outside the mentor-mentee relationship, such as tutoring. Other activities include college application assistance and SAT preparation (SAS).

Infrastructure. Experts on mentoring programs tend to emphasize the importance of organizational consistency, structure, and formal support for the mentoring relationship. With the exception of BB/BS and The Buddy System, programs tended to offer mentoring as one component of a comprehensive intervention. All of the programs have procedures in place, including availability of program staff, training of mentors, and continuous support and supervision of the mentor-mentee relationship. Research supports the value of these practices.

A note about school-based mentoring. The programs described above reflect practices of community-based mentoring programs. The number of *school-based* mentoring programs has increased recently, and less research is available to evaluate their outcomes. Herrera et al[MP2] do compare the characteristics of school-based programs with those of community-based programs. School-based programs take place at the youth's school, for about two hours a week after school. Mentors in both community- and school-based programs receive the same amount of prematch and postmatch training. School-based mentors spend more time working on academics or doing homework with their mentees. School-based mentors also have more contact with teachers than do community-based mentors. Programs based in schools deliver half the number of mentor-mentee contact hours as do community-based programs, and are therefore less expensive. The majority of mentors in both community- and school-

based programs report being emotionally and instrumentally supportive of their mentees. *Based on these preliminary findings, Herrera et al indicate that school-based mentoring programs may have the potential to help shape positive youth outcomes. They should therefore be rigorously evaluated.*

Table 2. Summary of Program Characteristics

		Across Ages	Avg. School-Based	Big Brothers/Big Sisters	BELONG	Buddy System	Campus Partners in Learning[1]	Career Beginnings	Hospital Youth Mentoring*	Linking Lifetimes	RAISE	Sponsor-A-Scholar
Goals	Stay in school and/or achieve		X	X	X	X	X	X	X	X[2]	X	X
	Prepare for college/employment							X	X			X
	Reduce anti-social behaviors	X		X	X	X	X				X	
	Increase self-esteem			X			X				X	
	Social skills			X			X					
Mentees	At-risk	X	X	X	X	X	X	X	X	X	X	X
	Motivated							X	X		?	X
	Elementary			X			X					
	Middle (6th-8th grades)	X		X	X	X	X		X	X	X	
	High school (9th-12th grade)			X		X	X	X	X	X	X	X
Mentors	College students				X		X					
	Other students		X									
	Employees								X			
	Community	X	X	X		X		X		X	X	X
Infrastructure	Mentoring embedded in program	X			X			X	X		X	X
	Program staff	X		X	X	X	X	X	?	X	X	X
	Mentor training	X	X	X	X	X	X	X	X	X	X	X
	Support and supervision	X	X	X	X	X	X	X	X	X	X	X
Type	One-on-one	X	X	X	X	X	X	X	X	X	X	X
	Group						X					
Activities with Mentor	Mostly structured							?	X			
	Mostly unstructured	X	X	X	X	X	X	?		X	X	X
	Academic	X	X		X		X	X	X	X	X	X
	Social	X		X	X	X	X	?	X	X	X	X
Activities w/o Mentor	Separate academic activities	X					X	X	X		X	X
	Other structured activities	X					X	X	X	X	X	X
Place	School	X	X		X		X	?	X			
	Church/Community				X		X	?	X			
	Wherever decided	X		X	X	X	X	?		X	?	X
Other	Most pairs meet x/month	8	?[3]	3	?[4]	?[4]		?	1	4	2	1
	Relationship lasts 1 yr or more	X		X				X	X	X	X	X
	Details vary by site			X			X	X	X		X	X

[1]There is considerable variability by program site in the degree of infrastructure, meeting frequency, where they meet, and whether one-on-one or group mentoring is used. Mentees had to be at-risk, but not so much that they wouldn't benefit from the program.
[2]Linking Lifetimes has a general goal of using elder mentors to help at-risk youth and young offenders become productive and self-reliant members of society.
[3]Mentors and mentees in school-based mentoring programs appear to meet weekly.
[4]Mentors were required to spend 10 –12 hours a week with or on behalf of the youth in the BELONG program, and every week for youth in the Buddy System .

PART II. DOCUMENTED MENTORING PROGRAM OUTCOMES

In the second and third part of this synthesis, we summarize the findings from across the programs and studies described in Part I. We focus on youth outcomes in four broad areas: (1) educational achievement and cognitive attainment; (2) health and safety; (3) socioemotional well-being; and (4) self-sufficiency. The mentoring programs examined here use formally arranged adult-youth relationships as a strategy to promote positive youth outcomes. While mentoring and case management are the primary components of the Big Brothers/Big Sisters intervention, for many other programs, one-on-one mentoring is generally only one component of a comprehensive intervention. Appendix B lists the activities available in each program. For example, some programs might include workshops for parents, a life-skills curriculum for youth, separate tutoring, or financial support for college. **Therefore, it is important to note that other factors besides mentoring itself may have contributed to the documented outcomes.**

Tables 3a, 3b, 3c, and 3d summarize the findings discussed in Part II. We restrict our assessment of impacts for youth well-being to randomized experimental evaluations.[1] Additional methodological criteria include: a minimum of 25 youth per treatment and control groups and a minimum retention rate of 60 percent. Studies focused on special populations (e.g., adolescents with severe physical challenges) were also excluded. The tables are organized with the following columns:

- The "youth outcomes" column (first on the left) lists specific outcomes that a mentoring program seeks to achieve.
- The "mentoring programs work" column (second from left) describes specific evidence from experimental studies that mentoring programs significantly affected the listed youth outcome.
- The "mentoring programs don't work" column (center) summarizes the experimental evidence to date that specific outcomes were not affected by mentoring programs. However, this should not be construed to mean that mentoring programs can never affect this outcome, or that mentoring programs cannot be modified to affect this outcome.
- The "mixed reviews" column (second from right) lists evidence from experimental evaluations that mentoring programs have been shown to be effective in some but not all studies, or have been found to be effective for some but not all groups of children.
- The "best bets" column (far right) describes practices that may be important from a theoretical standpoint, on the basis of quasi- or non-experimental analyses, or on the basis of wisdom from the practice field, but which have not been thoroughly tested.

A. Educational Achievement and Cognitive Attainment
Overall, youth participating in mentoring relationships improved on some important educational measures.

Academic achievement is a key predictor of future socioeconomic attainment. Many programs therefore target improvement in youth educational outcomes as a primary goal. Overall, it appears that mentoring programs have made successful strides toward improving many education outcomes.

There is modest evidence that youth participating in mentoring may experience a **slight improvement in their grades**, but further rigorous evaluation is needed to confirm this finding. Youngsters who were mentored through the Big Brothers/Big Sisters program experienced modest gains in their GPAs over time compared with non-participants.[BBS1] These gains were strongest among minority females who had GPAs of about a "B-" compared with a "C+" for minority females who were not in the program. Some evidence contradicts this pattern. Mentored students in Project BELONG were less likely than the control group to be failing math (30 percent vs. 43 percent), but not English (25 percent vs. 30 percent), reading (15 percent vs. 16 percent), or social studies (24 percent vs. 30 percent).[BLNG] Participants in the Across Ages program did not have better grades at the end of their sixth-grade year, when compared with a control group of non-participants.[AA2] Evaluators did not have an explanation for this lack of impact.

Non-experimental analyses suggest a reason for the connection between mentoring and grades: Little Brothers and Little Sisters experienced better academic outcomes because participating in mentoring programs improved both their relationships with their parents and their perceived scholastic competence.[BBS3] Overall, however, additional rigorous evaluation is needed before we can conclude with confidence that mentoring improves students' grades.

Rigorous program evaluations consistently show that youth participating in mentoring programs have **fewer unexcused absences** from school than do similar youth not participating in mentoring programs.[BBS1,AA1,AA2] Little Brothers and Little Sisters, for example, skipped half as many days of school as did control youth.

Participating in mentoring programs influences academic attitudes. Youth who had one-on-one mentoring (not necessarily focused on academic goals) had **higher perceived scholastic competence**[BBS1] than non-participants. Students with mentors in the Across Ages program had significantly **better attitudes toward school**, the future, and elders than did youth who did not participate in the program or who participated in the program without a mentor.[AA1,AA2] Teachers viewed the mentored students in Project BELONG as placing a greater importance on school than the control group students.[BLNG] Additional analyses of the Big Brother/Big Sister program suggest that youth experience better attitudes toward school because participation in mentoring

improves both their relationships with their parents and their perceived scholastic competence.[BBS3]

Results from Career Beginnings, an academically oriented program that includes one-on-one mentoring as one component among a range of services, show **positive results for college attendance**.[CB1] Participants were somewhat more likely to attend college during the first year after high school graduation than were non-participants.

Youth participating in Project BELONG displayed better **behavior at school** than control group members. Teachers rated them as more engaged in classroom activities than the control group. The teachers were also less likely to report behavior problems for the mentored youth, and the percentage of mentored youth referred to the school administration for severe discipline problems decreased from pre- to post-intervention (19 percent for mentored youth vs. 12 percent for the control group). [BLNG]

Table 3a. Mentoring Programs and Youth Outcomes: Review of Effects on Educational Achievement and Cognitive Attainment Outcomes

YOUTH OUTCOMES	MENTORING PROGRAMS WORK	MENTORING PROGRAMS DON'T WORK	MIXED REVIEWS	"BEST BETS"
EDUCATION				
High school grades (3 experimental studies)			Compared to control group: • modest gains in GPA overtime[BBS1] • Mentored youth were less likely to be receiving a failing grade in Math [BLNG] BUT they: • were not less likely to be receiving a failing grade in English, Reading, or Social Studies [BLNG] • did not have significantly different GPA[AA2]	The following practices are best bets for improving high school grades: • Mentoring programs that improve parental relationships and scholastic competence[BBS3] • More frequent contact with mentor[SAS1,MP1] • More frequent visitation with mentor[SAS1] • Mentor relationships lasting 12 months or more[MP1] • Higher quality mentor relationships[SAS1,MP1] • Mentors know youth's parents well[SAS1]
School Absences (3 experimental studies)	Compared to control group: • program participants had fewer unexcused absences from class or school[BBS1,AA1,AA2]			The following practices are best bets for reducing school absences: • More frequent contact with mentor[AA1,MP1] • High involvement with mentors[AA1] Mentor relationships lasting 6 months or more[MP1]
Perceived scholastic competence (1 experimental study)	One-on-one mentoring led to: • improvements in perceived scholastic competence[BBS1]			The following practices are best bets for increasing perceived scholastic competence: • More frequent contact with mentor[MP1] • Mentor relationships lasting 12 months or more[MP1] • Higher quality mentor relationships[MP1]

Program symbols:

AA	Across Ages	CP	Campus Partners in Learning	MP	Multiple Programs
BBS	Big Brothers/Big Sisters	CB	Career Beginnings	R	RAISE
BLNG	BELONG	HP	Hospital Youth Mentoring Program	SAS	Sponsor-A-Scholar
BS	Buddy System	LL	Linking Lifetimes		

(BB/BS and SAS are the only two programs represented in study MP2)

YOUTH OUTCOMES	MENTORING PROGRAMS WORK	MENTORING PROGRAMS DON'T WORK	MIXED REVIEWS	"BEST BETS"
Attitudes about school **(3 experimental studies)**	**Those participating in a program with mentoring:** • **had better attitudes toward school compared to non-participants or participants who did not get mentoring**[AA1,AA2] • **were viewed by their teachers as placing a higher value on school** [BLNG]			**The following practices are best bets for improving attitudes towards school:** • Mentoring programs that improve parental relationships and scholastic competence[BBS3] • High involvement with mentors [AA1]
College attendance (1 experimental study)	Compared to control group, program participants: • were more likely to attend college (48.5% vs. 53.2%)[CB1]			The following practices are best bets for improving college attendance: • More frequent contact with mentor[MP1] • Higher quality mentor relationships[SAS1] • Mentors know youth's parents well[SAS1] • College tuition assistance[SAS1]
School Behavior (1 experimental study)	Youth in a mentoring program: • were rated by their teachers as more engaged in the classroom than youth in the control group [BLNG] Compared to a control group: • Teachers were less likely to report behavior problems for mentored students [BLNG] • The percentage of mentored youth referred to School administrators for a severe discipline infraction decreased from pre to post intervention [BLNG]			

B. Health and Safety
Mentoring approaches show promise in the prevention of substance abuse.

The main health and safety outcomes targeted by mentoring programs relate to substance use and delinquent behavior. The evaluations in this review include young participants (even as young as 10 years old) who have not yet experimented with substances.[BBS1] For example, the strategy of the Across Ages program is to inhibit substance use among younger adolescents, who are typically not yet experimenting with drugs, by targeting the risk and protective factors associated with substance use.[AA1, AA2]

Mentoring relationships help reduce substance use among youth. Little Brothers and Little Sisters were 46 percent less likely than peers in a control group to initiate drug use during the study period (18 months). An even stronger effect was found for minority Little Brothers and Little Sisters, who were 70 percent less likely to initiate drug use than other similar minority youth.[BBS1] Little Brothers and Little Sisters were 27 percent less likely than youth in a control group to initiate alcohol use during the study period, and minority Little Sisters were about half as likely.[BBS1]

Students with mentors in the Across Ages program had significantly better reactions to situations involving drug use than those not participating in the program.[AA1] They were also less likely to initiate marijuana use six months *after* the program ended.[AA2] However, in the short term, they did not use substances less frequently than the control group (this may be due to overall low levels – an average 0.16 on a 0-5 scale).[AA1] Results from additional participants of the Across Ages program repeat this pattern for short-term marijuana use.[AA2]

Mentoring relationships influence some behaviors of youth. Little Brothers and Little Sisters were almost one-third less likely than controls to hit other people.[BBS1] Results from an additional study indicate that youth participating in mentoring programs were less likely to engage in "problem" behaviors.[AA2] Compared to the control group, mentored youth in Project BELONG committed fewer misdemeanors or felonies (offenses were reduced from 4 percent to 1 percent).[BLNG] The seriousness of these offenses was less for the mentored youth than for the control group youth.[BLNG] Mentoring reduced the likelihood that youth with a prior history of arrest would commit a major offense during the program year and two years after.[BS1,BS2] However, there were no significant differences between youth participating in the BB/BS program and the control group on behaviors such as how often the youth stole or damaged property over the past year, was sent to the office at school, engaged in risky behavior, fought, cheated, or used tobacco.[BBS1]

Table 3b. Mentoring Programs and Youth Outcomes: Review of Effects on Health and Safety

YOUTH OUTCOMES	MENTORING PROGRAMS WORK	MENTORING PROGRAMS DON'T WORK	MIXED REVIEWS	BEST BETS
HEALTH AND SAFETY				
Drug and alcohol use (3 experimental studies)	Compared to control group, program participants • were less likely to initiate drug[BBS1] and alcohol use[BBS1 AA2] (especially minority youth)[BBS1] • had better reactions to situations involving drugs and alchohol[AA1] • were less likely to initiate drug-use 6 months after program participation[AA2]		Results for marijuana use insignificant for short-term[AA2]	The following practices are best bets for reducing drug and alcohol use: • More frequent contact with mentor[MP1] • High involvement with mentors[AA1] • Mentor relationships lasting 12 months or more (6 mos or more for alcohol use)[MP1] • Higher quality mentor relationships[MP1]

Behaviors related to delinquency (5 experimental studies)			Compared to a control group, mentored youth were: • less likely to hit someone[BBS1] • less likely to engage in problem behavior[AA2] • less likely to commit misdemeanors or felonies[BLNG] • committing less serious offenses[BLNG] • less likely to commit a major offense in the program year(37.5% vs 64%)[BS1], or in the program year or two years later (56% vs 78%),[BS2] (only for mentored youth with a history of committing major offenses) BUT, program participation did not impact behaviors such as: • stealing or damaging property[BBS1] • number of times youth sent to office[BBS1] • doing risky things, fighting • cheating[BBS1] • using tobacco[BBS1] Youth without a prior major offense were more likely than a control group to commit a major offense in the program year(16% vs 7%)[BS1], or in the program year or two years later (23% vs 16%)[BS2]	

Program symbols:

AA	Across Ages	CP	Campus Partners in Learning	MP	Multiple Programs
BBS	Big Brothers/Big Sisters	CB	Career Beginnings	R	RAISE
BLNG	BELONG	HP	Hospital Youth Mentoring Program	SAS	Sponsor-A-Scholar
BS	Buddy System	LL	Linking Lifetimes		

(BB/BS and SAS are the only two programs represented in study MP2)

C. Social and Emotional Development
Mentoring improves a number of outcomes, although the effects are sometimes indirect.

Mentoring relationships do not consistently improve children's self-perception. Overall, it is not clear whether self-esteem is a viable target for mentoring programs. Tierney and colleagues do not find that participants in the BB/BS program have levels of self-esteem that are significantly different than similar youth who remained on a waiting list for a mentor.[BBS1] However, subsequent studies of the BB/BS program suggest that mentoring indirectly improves children's self-esteem by improving parent-child relationships.[BBS3]

Students participating in the Across Ages program (including its mentoring component) have better outcomes on some measures of self-perception. Their scores on a standardized assessment of well-being are slightly but significantly higher than the scores of a control group.[AA1] They also had a greater sense of self-control.[AA2] However, they did not have significantly better scores on a more specific measure of self-perception.[AA1]

Time may determine whether mentoring relationships affect self-esteem. Mentoring relationships that last 12 months or longer are associated with significant improvements in adolescents' self-worth, whereas those of shorter duration tend to have mild or even negative effects on this outcome (Grossman and Rhodes (1999), as summarized in BBS3).

Participating in mentoring promotes pro-social behaviors and attitudes. Consecutive evaluations of the ongoing Across Ages program show that participants who received mentoring (in addition to other program activities) have significantly more positive attitudes toward school, the future, the elderly, and helping behaviors.[AA1,AA2] Further, participants in BB/BS felt that they communicated better with their parents and had more emotional support from friends.[BBS1] The latter finding is especially true for minority males.[BBS1]

Mentoring can influence resources that promote positive child outcomes. Participating in one-on-one mentoring may not directly influence a young person's self-esteem or school performance. However, non-experimental analyses suggest that youth still experience improvements in these areas because mentoring improves parental relationships and scholastic confidence, thereby improving a youth's self-worth, increasing the value he or she attaches to academic activities, and raising grades.[BBS3]

Table 3c. Mentoring Programs and Youth Outcomes: Review of Effects on Socioemotional Well-being

YOUTH OUTCOMES	MENTORING PROGRAMS WORK	MENTORING PROGRAMS DON'T WORK	MIXED REVIEWS	"BEST BETS"
SOCIAL AND EMOTIONAL				
Self perceptions (3 experimental studies)			Compared to non-participants, those participating in mentoring programs had: better sense of well-being[AA1] greater sense of self-control[AA2] BUT not different levels of: Harter self-perception[AA1] self confidence[AA2] self-esteem[BBS1]	The following practices are best bets for improving self-perception: • Mentoring programs that improve parent-child relationships[BBS3] • Mentor relationships lasting 12 months or more[BBS5]
Exposure to social/cultural activities (1 experimental study)		Program participation is ineffective[BBS1]		
Positive attitudes toward school/future/ elderly/helping (2 experimental studies)	Program participation is effective at increasing positive attitudes toward school/future/ elderly/helping[AA1,AA2]			The following practices are best bets for improving attitudes: • High involvement with mentors[AA1]
Family relationships (1 experimental study)	Participants felt that they communicated better with their parents[BBS1] (especially white males)			
Peer relationships (1 experimental study)	Emotional support at outcome was higher among LB/LS compared to controls (especially true for minority males)[BBS1]			

Program symbols:

AA	Across Ages	CP	Campus Partners in Learning	MP	Multiple Programs
BBS	Big Brothers/Big Sisters	CB	Career Beginnings	R	RAISE
BLNG	BELONG	HP	Hospital Youth Mentoring Program	SAS	Sponsor-A-Scholar
BS	Buddy System	LL	Linking Lifetimes		

(BB/BS and SAS are the only two programs represented in study MP2)

D. Self-Sufficiency

It is not clear whether mentoring influences young adult self-sufficiency.

Career Beginnings,[CB1] with its focus on future careers, targets at-risk high school students for intensive college preparation and workforce training activities, as well as one-on-one mentoring. The participants in the experimental group actually worked significantly *less* than youth in the control group during the year after high school (79.9 percent of participants vs. 84.1 percent of controls). However, these results were expected. The authors attribute (although they did not test) this difference to a greater percentage of program participants trading work for participation in higher education. The significant difference disappears by the end of the year follow-up (when employment participation is measured on a month-by-month basis). Ideally, it would be useful to have longer-term comparisons of the experimental and control group.

Surprisingly, participants in the experimental group did not engage in productive activity (either employment, post-secondary education, or the military) any more than participants in the control group.[CB1] A majority of both groups (about 95 percent) were engaged in productive activity a year after high school.

Table 3d. Mentoring Programs and Youth Outcomes: Review of Effects on Self-Sufficiency

YOUTH OUTCOMES	MENTORING PROGRAMS WORK	MENTORING PROGRAMS DON'T WORK	MIXED REVIEWS	"BEST BETS"
SELF-SUFFICIENCY				
Employment (1 experimental study)			Program participants worked significantly less than the control group during the year after high school[CB1] • But, the authors attribute this finding to a greater percentage of program participants trading work for participation in higher education	
Productive Activity (1 experimental study)		Experimental participants did not engage in employment, post-secondary education or the military any more than the control group[CB1] • Levels were high for both groups		

Program symbols:

AA	Across Ages	CP	Campus Partners in Learning	MP	Multiple Programs
BBS	Big Brothers/Big Sisters	CB	Career Beginnings	R	RAISE
BLNG	BELONG	HP	Hospital Youth Mentoring Program	SAS	Sponsor-A-Scholar
BS	Buddy System	LL	Linking Lifetimes		

(BB/BS and SAS are the only two programs represented in study MP2)

E. Summary: Mentoring Outcomes

Based on evaluation studies, youth who participate in programs that include stand-alone mentoring or mentoring as one component of a comprehensive intervention have the following positive outcomes, compared with similar youth:

- Significant reductions in school absence;
- Higher college participation;
- Better school attitudes and behavior;
- Less drug and alcohol use (especially among minority youth);
- Less likelihood of hitting others;
- Less likelihood of committing misdemeanors or felonies and major offenses;
- More positive attitudes toward their elders and toward helping;
- Improved parental relationships and support from peers.

On the other hand:

- Further evaluation is needed to confirm whether mentoring improves grades;
- Mentoring does not improve all behaviors related to delinquency;
- It is not clear that mentoring improves self-esteem;
- Mentoring did not increase employment one year after high school, although this may be due to higher enrollment in post-secondary education;
- Mentoring did not increase already-high levels of "productive activity" by youth during the year after high school.

PART III. IMPLEMENTATION CHARACTERISTICS THAT STRENGTHEN OR WEAKEN MENTORING

In this section we summarize evidence of effective and ineffective mentoring program practices, based on our review of the mentoring literature. We define "effective" mentoring in two ways: it improves youth outcomes, or it results in successful mentor-mentee relationships. Tables 4 and 5 highlight these different approaches to assessing effective mentoring. These analyses are generally non-experimental; consequently, causality can be inferred but cannot be definitively established.

A. Program practices that are associated with youth outcomes

1. Students in longer-lasting mentoring relationships have better outcomes.

Generally, significant positive effects increase as a mentoring relationship endures. Analyses of the BB/BS program shows that, compared with non-mentored youth, mentored youth in relationships lasting more than twelve months felt more confident about doing their schoolwork, skipped fewer school days, had higher grades, and were less likely to start using drugs or alcohol. Students in relationships lasting six to twelve months skipped fewer school days. Conversely, students in one-on-one mentoring relationships of shorter duration (three to six months) experienced no significant improvements in academic, social, or substance use outcomes. Further, youth in relationships lasting less than three months felt less confident about doing their school work and had substantially lower self-worth, although, surprisingly, they had slightly higher grades.[MP1]

This latter finding suggests that **relationships that dissolve quickly (under 3 months) may actually *harm* children**. Youth who have experienced unsatisfactory or rejecting parental and adult relationships in the past may develop fears and doubts about whether others will accept and support them. Mentoring relationships that aren't successful have the potential to reinforce these fears.

One important caveat: the BB/BS program has an explicit goal of creating lasting relationships—if a relationship dissolves in less than 3 months, this may indicate a problematic matching. Although these findings raise a warning flag, it is possible that programs with goals spanning a school year or supplemented with activities besides mentoring can still be effective.

2. Youth benefit from mentors who maintain frequent contact and who know the mentee's family.

Frequent communication and getting to know a student's family (activities that are encouraged and supported by program staffing) significantly affect the development of strong relationships and student performance. Across two program evaluations (Big Brothers/Big Sisters and Sponsor-A-Scholar), students whose mentors contacted them most often had significantly better outcomes than comparison groups on a range of

indicators: higher grades, college attendance, greater confidence about school work, fewer school absences, and less initiation of drug use. Conversely, students who rarely saw or spoke with their mentors did not experience benefits from program participation, and may even have experienced harm: They did not experience improvements in academics or substance use, and they experienced lower self-esteem compared with non-participants.[MP1,SAS1]

Students perceived by staff as being highly involved with their mentors were absent significantly less often than those whose mentors were involved at an average or marginal level (7.4 vs. 12 vs. 25.4 days absent from school). Further, those with highly involved mentors had significantly better attitudes toward school, the future, and elders; better reactions to situations involving drug use; and more knowledge about substance abuse than those students with marginal or average mentoring.[AA1]

When students perceived that their mentor knew their parents well, these youth had better GPAs and higher levels of college attendance than non-participants.[SAS1]

3. The program participant's positive perception of the mentoring relationship increases the chances of successful outcomes.

Two studies indicate that students who gave their mentoring relationship the highest positive rating have better academic outcomes and substance use outcomes than non-participants. "Quality" was conceptualized as a "youth-centered" relationship, in line with the model of a developmental mentor (see Table 4 footnote for details). Further, those students who gave their mentor-mentee relationship the lowest rating did not experience academic, health, or social benefits as a result of their participation in a mentoring program.[MP1]

4. Stand-alone mentoring has advantages and disadvantages.

To our knowledge, no study uses an experimental design to compare programs consisting only of mentoring to programs with a more comprehensive mentoring approach. In fact, while mentoring is the sole component of the Big Brothers/Big Sisters intervention, one-on-one mentoring is only one component of a comprehensive intervention for most other programs evaluated in this review. That said, we can glean some information from the programs evaluated here.

- An impact evaluation of the Big Brothers/Big Sisters program demonstrates that youth can benefit from a program in which one-on-one mentoring is the sole component. This program carefully screens mentors and mentees, carefully supervises and supports the relationship, and emphasizes a "developmental" approach to mentoring.

- Evaluations have also demonstrated benefits to youth who participate in programs that include other activities in addition to one-on-one mentoring.

- Among these other programs, some findings do support a unique contribution of the mentoring component: In the evaluation of the RAISE program, better outcomes were documented among participants who experienced stronger (vs. weaker) mentoring.[R1]

- In the Across Ages evaluations, three groups are compared: (A) those who received no treatment; (B) those who were assigned to participate in program activities only; and (C) those who were assigned to participate in program activities and one-on-one mentoring. On the following outcomes, those who received mentoring (group C) had better results than group B on several measures: attitudes toward school, the future, and elders; the Rand well-being scale; reactions to situations involving drug use; community service; and frequency of substance use.[AA1] For subsequent cohorts, those who received mentoring (group C) had better results than group B in terms of: self control, cooperation, family bonding, fewer absences, less problem behavior, and better attitudes toward the elderly and helping others.[AA2]

5. Mentees who are the most disadvantaged and/or at-risk are especially likely to gain from mentoring programs.

Those who benefited the most from Sponsor-A-Scholar are those who had fewer resources already at their disposal – students who came from families with the least support, who attended some of the poorest-performing schools, who had the lowest initial GPAs, and who were the least motivated at the outset (as measured by school absences). For example, those who entered the program with the lowest ninth-grade GPAs showed a significant impact from program involvement on tenth and eleventh grade GPAs and on college attendance in the first two years after high school.[SAS1] However, some of the very worst-off children did not make it into the program. To be eligible, youth had to show evidence of motivation measured by their school involvement; they could not be extremely shy; and they could not have difficult circumstances that would tax the program beyond its capabilities. Such thresholds for participation were common across different programs.

Among those with initially low achievement levels in the BB/BS program, mentored youth were less likely to skip school and start using drugs.[MP1]

In both programs, among those with initially high achievement levels, mentored youth experienced no significant impact.[MP1]

In the Buddy System program, mentored youth with a prior history of committing major offenses were significantly less likely than a control group to commit a major offense during the program year or two years later. However, mentored youth without this history were *more* likely than the control group to commit a major offense during the program year or two years later.[BS1,BS2]

6. Cross-race matches are as successful as same-race matches.

While programs attempt to match youth and mentors on characteristics such as interests, location, sex, and race, sometimes these efforts extend the time it takes to make a match. Is the wait worthwhile? Available evidence suggests that cross-race matches are just as successful as same-race matches for improving eleventh-grade GPA, college attendance, and college retention.[SAS1]

7. The effects of mentoring seem to be limited in duration, but needs further study.

Most studies did not look critically at the duration of mentoring impacts. However, one study did show evidence that all the program impacts disappeared when the intervention ended (with the exception that program participation resulted in less marijuana use six months after the intervention).[AA2] The authors suggest that this is evidence that at-risk students may need particularly long-lasting interventions to create life-changing impacts.

Summary: Program Practice Effectiveness

While many of these insights are based on non-experimental analyses, they do suggest a number of conclusions about the effectiveness of mentoring programs:

- Generally, significant positive impacts increase the longer a mentoring relationship lasts. This is the case for high school academic outcomes and drug or alcohol use, with best results for relationships lasting more than 12 months.
- Mentoring relationships that are short-lived have the potential to harm children.
- Youth whose mentors contact them frequently have better grades, increased college enrollment, fewer absences, and less initiation of drug use.
- Low levels of contact between mentors and mentees are harmful to youth.
- Youth-centered mentor-mentee relationships are associated with better academic outcomes.
- Mentees who are the most disadvantaged or at-risk are especially likely to gain from mentoring programs.
- Cross-racial mentoring relationships are as successful as same-race matches.
- At-risk students may need particularly long-lasting interventions to create life-changing impacts.

Table 4. Review of Effective Mentoring Program Practices: "Best Bets" for Youth Outcomes**

PROGRAM PARTICIPANT CHARACTERISTICS	BEST BETS	E	H	SE	SS	MIXED REVIEWS CAUTIONARY NOTES	E	H	SE	SS
FREQUENCY OF CONTACT* (3 studies)	**Students whose mentors contacted them most often:** Higher 10th/11th grade GPAs[SAS1] Higher 1st/2nd yr college attendance [SAS1] Higher college retention [SAS1] Less school absence [AA1] Higher school competency [MP1] Less likely to skip school [MP1] Higher grades [MP1] Less likely to start using drugs [MP1] **Students whose mentors saw them most frequently** Higher 10th/11th/12th grade GPA[SAS1] **Students perceived as "highly" involved with mentors:** Absent less often [AA1] Better attitudes toward school, future, elders [AA1] Better reactions to situations involving drug use [AA1] Better knowledge of substance abuse [AA1] (compared to those w/average or marginal levels) (moderate contact also has some significant optimal associations with academic outcomes and substance use)[MP1]	X	X			**Students who see or talk rarely with their mentors:** Virtually no significant impacts on academics compared to the control group[SAS1] Lower self-esteem[SAS1] No significant impacts on substance use[MP1]	X	X	X	

** Youth outcome domains:
E Educational Achievement
H Health and Safety
SE Socio-emotional
SS Self-Sufficiency

Program symbols:
AA Across Ages
BBS Big Brothers/Big Sisters
BLNG BELONG
BS Buddy System
CP Campus Partners in Learning
CB Career Beginnings
HP Hospital Youth Mentoring Program
LL Linking Lifetimes
MP Multiple Programs
R RAISE
SAS Sponsor-A-Scholar

(BB/BS and SAS are the only two programs represented in study MP2)

PROGRAM/PARTICIPANT CHARACTERISTICS	BEST BETS	E	H	SE	SS	MIXED REVIEWS/CAUTIONARY NOTES	E	H	SE	SS
LENGTH OF RELATIONSHIP* (1 study)	**Students in stand-alone mentoring relationships lasting more than 12 months:** Better academic confidence[MP1] Skipped school less[MP1] Higher grades[MP1] Less likely to start using drugs or alcohol[MP1] **Students in stand-alone mentoring relationships lasting 6-12 months:** Skipped fewer days of school[MP1]	X	X			**Students in stand-alone mentoring relationships lasting 6-12 months:** Had no significant impacts on drug/alcohol use[MP1] **Students in stand-alone mentoring relationships lasting 3-6 months:** Had no significant impacts[MP1] **Students in stand-alone mentoring relationships lasting less than 3 months:** Less academic confidence[MP1] Lower self-worth[MP1] (although they have slightly higher grades than control group)	X	X	X	
QUALITY OF RELATIONSHIP+ (2 studies)	**Students who had the highest positive rating:** Higher grades[SAS1,MP1] More likely to be enrolled in 1st/2nd year college[SAS1] Higher perceived school competence[MP1] Less likely to start using drugs[MP1] Less likely to start using alcohol[MP1] Students who gave moderately positive ratings also had some optimal academic and behavioral outcomes	X	X			**Students who had the lowest positive rating:** Had virtually no significant impacts[MP1]				
MENTOR RELATIONSHIP WITH YOUTH PARENTS (1 study)	**Students who said their mentors knew their parents well:** Higher GPA[SAS1] Higher levels of college attendance[SAS1]	X				**Students who said their mentors did not know their parents well:** Had virtually no significant impacts on academics[SAS1]	X			
CROSS-RACE MATCHES (1 study)	**As effective as same-race matches for:** 11th grade GPA[SAS1] College Attendance[SAS1] College retention[SAS1]	X								
MENTEE CHARACTERISTICS* (3 studies)	**Students who had low grades initially:** Skipped fewer days of school[MP1] Higher 10th/11th grade GPAs[SAS1] More likely to attend 1st/2nd year college[SAS1] **Students who had moderate grades initially:** Higher levels of school competence[MP1] More likely to attend 1st year of college[SAS1] Less likely to start using drugs[MP1] **Students who had high absentee rates initially:** Skipped fewer days of school[MP1] Higher 10th/11th grade GPAs[SAS1] More likely to attend 1st year college[SAS1]	X X	X			**Students who had high grades initially:** Did not have significantly different outcomes compared to the control group[MP1,SAS1] **Students who had low absentee rates initially:** Did not have significantly different outcomes compared to the control group[MP1,SAS1] (except, they skipped fewer days of school)[MP1]	X X	X		

PROGRAM/PARTICIPANT CHARACTERISTICS	BEST BETS	E	H	SE	SS	MIXED REVIEWS/CAUTIONARY NOTES	E	H	SE	SS
	Students with minimal family support initially: Higher 10th grade GPAs[SAS1] More likely to attend 1st/2nd year college[SAS1] **Youth with a history of committing a major offense:** Were less likely than a control group to commit a major offense in the program year(37.5% vs 64%)[BS1], or in the program year or two years later (56% vs 78%)[BS2]	X	X			**Students with minimal family support initially:** Do not experience less drug/alcohol use compared to control group[MP1] **Students with high family support initially:** Did not have significantly different academic or drug/alcohol outcomes compared to the control group[MP1,SAS1] **Youth with NO history of committing a major offense:** Were more likely than a control group to commit a major offense in the program year(16% vs 7%)[BS1], or in the program year or two years later (23% vs 16%)[BS2]	X	X		
COMMUNITY CHARACTERISTICS (1 study)	**Students in schools with high- to mid-level dropout rates:** Had higher 10th/11th grade GPAs[SAS1] Were more likely to attend 1st year of college[SAS1]	X				**Students in schools with low dropout rates:** Did not have significantly different academic or drug/alcohol outcomes compared to the control group[SAS1] but were better on college prep	X	X		
OTHER (1 study)	**Financial Assistance:** 70% of SAS students indicated that the $6,000 made a big difference in their decision to attend college[SAS1]									
Stand-alone vs. Mentoring embedded in a program	**See discussion**									
School vs. Community based	**We have not found evaluations linked to outcomes, although studies are in progress**[MP2]									

+For this category, the definition of "relationship quality" is youth-centered
The BB/BS evaluation used a scale: youth's sense of disappointment in the mentor and the relationship, the youth's perception of whether the relationship is youth-centered, youth's emotional engagement in the relationship (i.e., whether youth is happy or feels special), and the caseworker's assessment of whether the mentor took a negative approach.
The SAS evaluation included one measure designed to reflect the youth's sense of the quality of the relationship, based on the youth's sense of how much respect, understanding, closeness and excitement there was in the meeting.

*Grossman and Johnson[MP1] established the following benchmark levels for these measures, based on their findings from the Big Brothers/Big Sisters program, and Sponsor-A Scholar[MP1]

GPA	BB/BS	SAS	Absenteeism	BB/BS	SAS	Mentor contact by phone	BB/BS	SAS
High	B's or higher	86.6 or higher	High	More than 1 day last year	More than 9% in 9th grade	High	More than once/wk	Once/week
Moderate	B's and C's	75.7-86.6	Moderate	1 day last year	Between 3-9% in 9th grade	Moderate	Once a week	More than once/mo, less than once/wk
Low	C's or lower	75.7 or lower	Low	0 days last year	Less than 3% in 9th grade	Low	Less than once/wk	Less than once/mo

(thresholds differ in part because programs have different meeting requirements)

B. Characteristics shaping longer-lasting or higher quality relationships

The first section of Part III discussed the elements of programs that have been linked to youth outcomes. We turn now to program practices that are "effective" in the sense that they are associated with better-quality relationships – those that last longer, involve more frequent contact, or are rated as such by the mentor or mentee. From the previous section, we know that better-quality relationships lead to better youth outcomes; regrettably, fewer studies are able to test these associations experimentally.* However, experts in the field of mentoring, and evidence from non-experimental studies support the following associations:

1. A developmental approach to mentor-mentee relationships produces better relationships for the mentees than a prescriptive approach.

In an in-depth nine-month study of 82 BB/BS matches, Morrows and Style (1995) identify two main types of mentoring relationships and the outcomes they produce. "Developmental" volunteers were adult mentors who held expectations that varied over time in relation to their perception of the needs of the youth. In the beginning, the mentors devoted themselves to establishing a strong connection with the youth. They felt satisfied with their mentee's progress and with the relationship overall; when doubts arose they were more likely to consult caseworkers for reassurance or advice. The youth in these relationships reported feeling a considerable sense of support from their adult friend. Further, many of the youth in developmental relationships demonstrated a pattern of seeking help independently and voluntarily divulged difficulties in their school or personal lives, allowing the volunteer to provide guidance and advice.

"Prescriptive" volunteers viewed *their own* goals for the match (usually these are "good" goals, e.g., academic achievement) as primary rather than the youth's. Some prescriptive volunteers required the youth to take equal responsibility for maintaining the relationship and for providing feedback about its meaning. The prescriptive volunteers ultimately felt frustrated. The youth were similarly frustrated, unsatisfied with the relationship, and far less likely to regard their mentor as a source of consistent support.

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* One recent unpublished study *does* rigorously evaluate how mentee and mentor characteristics affect the duration of their relationship. Grossman and Rhodes[BBS5] analyze sub-group data from the BB/BS Impact Study and find that the following characteristics place matches at greater risk of breaking up: (1) matches with adolescents who were referred for psychological or educational programs, or had sustained emotional, sexual, or physical abuse; (2) matches involving 13-16 year olds, which were 65 percent more likely to break up than matches involving 10-12 year olds; (3) matches involving lower income volunteers; (4) same-race minority matches compared with same-race white matches *except* in minority matches in which race was an explicit matching criteria; and (5) matches involving volunteer married persons 26-30 years old, who were 86 percent more likely to terminate their relationship each month compared with matches with 18-25 year old volunteers, and far more likely than non-married 26-30 year olds (who were *less* likely to terminate relationships compared with 18-25 year old volunteers). The negative effects of being a married volunteer 26-30 years old and being of lower income are due to the lower levels of youth-centeredness in these relationships. Considering that very short relationships have the potential to harm children, these findings suggest careful matching of mentors who have the available time to commit to mentoring. They also suggest supervision of the relationship to allow for problem-solving when conflicts do arise.

Often, these prescriptive relationships developed growing tension, which led, in part, to their frequent demise. Two-thirds of the prescriptive matches no longer met nine months after the first study interview, whereas only about 10 percent of the developmental relationships had ended.

Morrows and Styles (1995) believe that mentors who had been able to establish developmental relationships were those who adhered more closely to the standard BB/BS model, which stresses friendship, although this conclusion has not been tested with experimental methods.

2. Mentorship programs need structure and planning to facilitate high levels of mentor-mentee interaction.

An assessment of eight BB/BS agencies[BBS4] shows that **supervision of the match** was the program practice most associated with a high rate of interaction: Matches at agencies providing regular supervision were meeting the most frequently. Those agencies that reduced supervision of matches in an attempt to handle increasing caseloads also experienced a decrease in mentoring sessions. In some agencies, a reduction in the actual number of meetings occurred between the youth and adults within that same period; and in others, the loss of interest in the relationship was significant enough to end it.

Pre-match training. Mentors who received more hours of training had longer-lasting matches;[HP1] mentors who received six or more hours of training felt very close to their mentees.[MP2] Further, developmental relations are more likely to form in programs in which mentors have training, whereas nearly half of prescriptive relationships formed in sites not offering training.[BBS2]

Post-match training and support from program staff (at least two hours) contributed to mentors rating their relationships as close and supportive; conversely, mentors in the least close and supportive relationships had no training after the match and less than monthly contact with program staff.[MP2]

3. The place where a mentoring program is established can be important.

Locations of mentoring programs are not all the same. Different locations present different barriers to relationship development. An example from the Campus Partners in Learning program illustrates that careful attention to this detail can enhance mentoring and help expand the pool of available mentors.

A college campus presents a potential pool of mentors – college students. However, college students participate in a variety of activities, and as a young population on average, have limited access to personal transportation. In an assessment of six college-based Campus Partners In Learning Programs,[CP1] the four programs that established **set meeting times** for all program activities had higher attendance rates (70–90 percent) than the two programs that did not (35–40 percent). Further, for this

special population (college mentors), **providing transportation** to activities was conducive to longer-lasting relationships; conversely, lack of transportation hindered the development of lasting relationships. The combination of established meeting times and help with transportation resulted in the highest attendance rates.[CP1]

This example also reinforces the point that adequate supervision and structure is a resource that can strengthen mentoring relationships, in this case, when program coordinators address situation-specific barriers to relationship development.

4. Matching mentors and mentees on the basis of interests is more important than matching based on race or gender.

Matching mentors to mentees on the basis of race and gender does not appear to enhance relationship quality.[MP2,MP3] For example, racially unmatched mentors feel they are just as emotionally and instrumentally supportive and close as those in same-race matches.[MP2] Non-experimental research shows that cross-race matches meet just as frequently and consistently as same-race matches[MP3,BBS4] and are as likely to be developmental in nature[BBS2] (see Section B.1 for a definition of "developmental" vs. "prescriptive" relationships).

Instead, matching mentors on the basis of mutual interests leads to relationships characterized as close and supportive by mentors.[MP2] Echoing the 'developmental approach,' same-race matching may be beneficial when it reflects the wishes of the youth mentee. A youth-driven approach to mentoring leads to more satisfactory and long-lasting relationships.[MP2,CP1,LL1] Finally, while both are important, social activities appear to be more important than academic activities for creating close and supportive relationships.[MP2]

Summary: Higher-Quality Mentoring Relationships

Regrettably, few studies have experimentally evaluated which program characteristics result in quality mentor-mentee relationships. Evidence from less-rigorous non-experimental studies identifies the following program characteristics as supporting higher-quality mentor relationships:

- Structure and planning;
- Pre-match training;
- Post-match training and support;
- Supervision of the match;
- Consideration of mentor/mentee interests in the matching process;

- Social and academic activities (especially social, as such activities apparently help build trust);
- A youth-driven or "developmental" approach to the relationship;
- Cross-race matching, which appears to produce quality relationships as effectively as same-race matching.

Table 5. Review of Effective Mentoring Program Practices: "Best Bets" for Higher Quality Relationships

PROGRAM/PARTICIPANT CHARACTERISTICS	"BEST BETS"	MIXED REVIEWS/CAUTIONARY NOTES
Cross-Race Matches	Mentors feel they are just as emotionally and instrumentally supportive and close as same-race matches [MP2] These relationships are just as caring and supportive as same-race matches [MP3] Meet just as frequently and consistently as same-race matches [MP3,BBS4] These relationships are as likely to be developmental* as same-race matches [BBS2]	A cautionary note: loss of interest in the relationship was cited as one reason why cross-race matches dissolved [BBS4]
Cross-Gender Matches	Mentors feel they are just as emotionally and instrumentally supportive and close as same-gender matches [MP2]	
Matching of Interests	Mentors in the most close and supportive relationships were matched based on similar interests, [MP2] conversely, those in the least close and supportive relationships had dissimilar interests	
Pre-Match Training	Mentors who felt very close to their mentees had six hrs or more of training [MP2] Most developmental relationships formed in programs with training, whereas nearly half of prescriptive relationships formed in sites not offering training [BBS2] While those in SAS dismissed training as ineffective, [SAS1] even those who dismissed training as common knowledge admitted to having used the training [MP1] More hours of training lead to longer-lasting matches in the HYMP [HP1]	
Supervision and support	Post-match training and support from program staff (at least two hours) contributed to mentors rating their relationships as close and supportive; conversely, mentors in the least close and supportive relationships had no training after the match and less than monthly contact with program staff [MP2] Regular supervision and support of the mentor-mentee relationship leads to more frequent meetings, whereas less supervision and support lead to fewer meetings [MP3] Mentors in developmental relationships make use of activities and advice of program staff, whereas prescriptive mentors seem to dodge caseworkers and ignore their advice [BBS2] Relationships dissolve more quickly in programs in which the caseworker has low involvement [BBS4]	A note: Supervision and support is especially crucial to the survival of mentor-mentee relationships for youth exiting the structure of juvenile detention programs [MP3]

Program symbols:

AA	Across Ages	CP	Campus Partners in Learning	MP	Multiple Programs
BBS	Big Brothers/Big Sisters	CB	Career Beginnings	R	RAISE
BLNG	BELONG	HP	Hospital Youth Mentoring Program	SAS	Sponsor-A-Scholar
BS	Buddy System	LL	Linking Lifetimes		

(BB/BS and SAS are the only two programs represented in study MP2)

PROGRAM PARTICIPANT CHARACTERISTICS	"BEST BETS"	MIXED REVIEWS/CAUTIONARY NOTES
Mentors use youth-driven approach	**Mentors who allowed youth to influence activity choice were also in relationships that were the most close and emotionally/instrumentally supportive**[MP2] Youth are more satisfied with their relationship, and relationships last longer, when mentors take into account the needs/goals of their mentees[CP1,LL1]	
Content of activities	While both types are important, social activities are more important than academic activities for creating close and supportive relationships[MP2] Social activities are more relevant to creating close and supportive relationships than are hours spent together in a month[MP2]	
Set meeting times	Were conducive to longer-lasting relationships in programs using college students as mentors; conversely, without set meeting times relationships were more likely to dissolve [CP1]	
Providing transportation	Was conducive to longer-lasting relationships in programs using college students as mentors; conversely, lack of transportation hindered the development of lasting relationships[CP1]	
School vs. Community based	Regardless of program type: 1) engaging in social and academic activities, 2)greater contact, 3) youth-driven approaches, 4) matching mentors/mentees based on similar interests, 5) pre-match training, 6) post-match training, 7) support and 8) screening all lead to close and supportive relationships[MP2]	

*In an in-depth nine-month study of 82 BB/BS matches, Morrows and Style (1995) identify two main types of mentoring relationships and the outcomes they produce. **"Developmental"** volunteers are defined as those in which the adult volunteers held expectations that varied over time in relation to their perception of the needs of the youth. In the beginning, the volunteers devoted themselves to establishing a strong connection with the youth. Developmental volunteers felt satisfied with their youth's and relationship's progress—when doubts arose they were more likely to consult caseworkers for reassurance or advice. The youth in these relationships reported feeling a considerable sense of support from their adult friend.

"Prescriptive" volunteers, viewed as primary THEIR goals for the match rather than the youth's (usually these are 'good' goals, i.e. academic achievement). Some prescriptive volunteers required the youth to take equal responsibility for maintaining the relationship and providing feedback about its meaning. The prescriptive volunteers ultimately felt frustrated. The youth were similarly frustrated, unsatisfied with the relationship, and far less likely to regard their partner as a source of consistent support. Many of these relationships developed growing tension, which led, in part, to the demise of many of the prescriptive relationships. Two-thirds of the prescriptive matches no longer met nine months after the first study interview, whereas only about 10% of the developmental relationships had ended. Further, many of the youth in developmental relationships demonstrated a pattern of independent help seeking and voluntarily divulged difficulties in their school or personal lives, allowing the volunteer to provide guidance and advice.

PART IV. UNANSWERED QUESTIONS

A number of well-designed program evaluations indicate that mentoring programs are beneficial to at-risk youth. Given accumulating evidence about the effectiveness of these programs, and widespread interest in initiating these programs, further research would be helpful to those who seek to implement mentoring programs.

In particular, we see the need for research that evaluates and compares variations in mentoring programs. Many of the programs reviewed here target adolescent youth for one-on-one mentoring, which is often embedded within a variety of other program supports. It would be useful to compare the impacts of different program components, different models of mentoring relationships, and characteristics of program participants through experimental studies. It would be helpful to know:

- Is mentoring an effective strategy for other age groups – for example, does mentoring help young adults in need of job skills? Does mentoring influence good school and social habits for young children? Does effective mentoring "look different" when implemented for different age groups?

- Are other models, such as group mentoring, as effective as one-on-one mentoring?

- Is a particular set of activities more effective than others? Is mentoring that provides recreation along with tutoring and other assistance more effective than a narrower approach?

- How do other supportive program inputs (such as tutoring, life-skills programs, etc.) influence the impact of mentoring on youth outcomes? Is stand-alone mentoring as effective as mentoring that is combined with other program activities?

- What trade-offs should be considered in deciding whether a community-based program or place-based program will work best?

This mentoring synthesis identifies program practices that are associated with positive youth outcomes and quality mentoring relationships. However, we need data from planned variation experimental studies to be able to make confident and practical suggestions for practitioners. For example, we need answers to the following questions on the structure of mentoring programs:

- How do we assess "quality" mentoring? Can we establish commonly-accepted standards and benchmarks for assessing "best practices" and characteristics of effective mentoring? (Sipe, 1999)

- What is the cost of quality mentoring programs? (Grossman, 1999)

- How much training and ongoing support do mentors need for programs to achieve good outcomes?

- How many adults are willing to mentor youth? How do we best identify and recruit them? What level of staffing and resources are needed for these efforts? Do sufficient resources exist to train and support new mentors? (Sipe, 1999, 1996)

While mentors are clearly needed by many youth, we have learned that effective mentoring makes great demands on mentors and program structure. Effective mentors are willing to commit to a long-term relationship and make regular contact with their mentee, as well as participate in ongoing training and communication with program directors. Many potential mentors – college students, for example – may have difficulty meeting these requirements. Many worthwhile mentors from the community might be turned off by the time commitment of effective mentoring. *Should we simply discount these groups as a source of mentors?* Perhaps we can apply the "best practices" concepts learned thus far to research the trade-offs and benefits of different programs. For example, is it possible that short-term mentoring relationships can be supplemented with increased program structure or more frequent meetings to compensate for the brevity of the relationship? We do not yet know the answer to this broad question.

Appendix A: Program and Study Descriptions[†]

PROGRAM: ACROSS AGES

Population:
Population Served: varies – this is an ongoing program
Age: 6th graders
Other characteristics: Mainly low-income families living in distressed areas

Program components:

Component	Provided by	Duration	Description
Mentoring activities	Elder mentor	1 school year	1:1 ratio, formal/informal
Life-skill curriculum	School	1 school year	
Community service learning		10-12 visits over year	Visits at nursing home
Parent workshops (Study 1only)			Improve parenting

Program objectives/goals:
Safety and security: to prevent, delay, or curtail substance use among high-risk kids

STUDY 1:
AA1 LoSciuto, L., Rajala, A., Townsend, T.N. & Taylor, A. S. (1996). An outcome evaluation of Across Ages: An intergenerational mentoring approach to drug prevention. Journal of Adolescent Research, 11(1), 116-129.

Study objectives and measurements:

Objective

To evaluate the effectiveness of a comprehensive intergenerational mentoring approach to drug prevention for high-risk middle school students

Measurement instrument
Self-control, self-confidence, cooperation, family bonding, school bonding, absences from school, grades, alcohol use, marijuana use, problem behavior, attitudes toward ATOD use, attitudes toward helping others, and attitudes toward the elderly

Evaluation:
Type: experimental (mentor/curriculum/community service/workshops condition, curriculum/community service/workshops condition, and control condition; randomized pre-test/post-test collected for first year only

Statistical techniques: ANCOVA

Population evaluated: 562 6th graders living in three of Philadelphia's most stressed neighborhoods

[†] Format of these descriptions revised from "Mentoring At-Risk Youth: A Research Review and Evaluation of the Impacts of the SAS program on Student Performance." Dissertation. Amy Johnson, University of Pennsylvania, Graduate School of Education. 1997. Some details from four of these descriptions (CB1, R1, MP3, BBS1) were taken directly from Appendix C in this document.

Outcome:
Mentoring group had increased positive attitudes on four dimensions (school, the future, elders, and older people), increased knowledge about older people, improved reactions to situations involving drug use, and higher levels of community service. Participation in the mentoring group also significantly improved school attendance in youth. The Positive Youth Development Curriculum/community service/parent workshop condition improved knowledge about older people compared to controls. Mentor involvement was positively associated with improved school attendance.

Other information:
Data combined over three cohorts; 729 students completed the pre-test; of these, 77% or 562 students completed the post-test and makeup final sample

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STUDY 2:

AA2 Aseltine, R., Dupre, M., & Lamlein, P. (2000). Mentoring as a drug prevention strategy: An evaluation of Across Ages. Adolescent and Family Health, 1, 11-20.

Study objectives and measurements:

Objective

To assess whether the various elements of the program were effective in improving student outcomes in four areas: personal and social resources, school performance, problem behavior, including substance use, and attitudes toward the elderly.

Measurement instrument

Self-control, self-confidence, cooperation, family bonding, school bonding, absences from school, grades, alcohol use, marijuana use, problem behavior, attitudes toward ATOD use, attitudes toward helping others, and attitudes toward the elderly

Evaluation:

Type: experimental (mentor/curriculum/community service condition, curriculum/community service condition, and control condition); randomized pre-test, post-test seven – eight months after assignment, and six months after program ends.

Statistical techniques: t-tests (of estimates controlling for background characteristics)

Population evaluated: Approximately 400 sixth graders living in Massachusetts

Outcome:
Mentoring group had significantly lower levels of problem behavior and alcohol use and significantly higher levels of self-control, cooperation, attachment to school and family, school absences, and attitudes towards the elderly and helping as compared with the control group. Levels of self-control, school bonding and problem behavior for mentored youth were significantly different from both the control group and a group who received other program components not including mentoring. Six-month follow-up data revealed a lack of persistence in the program effects with the exception of cooperation, and evidence that mentoring reduces future initiation of marijuana use.

Other information:
District chosen was 40th in nation for poverty.
Approximately 72% of district were minorities, and 77% met the requirements for low income.
Attrition rates were low: More than 90% of those who completed the pre-test also completed the post-test. However, many students who did not complete the pre-test interview could be characterized as very needy students – those who were chronically absent from school, were kicked out for behavioral difficulties, or failed to meet academic requirements.

PROGRAM: BIG BROTHERS/BIG SISTERS

Population:
Population Served: 75,000 youth across the nation
Age: 5-18 year olds
Other characteristics: Youth who desire a match with a Big Brother or Big Sister; usually from a single parent family.

Program components:

Component	Provided by	Duration	Description
Mentoring*	Adult volunteers	At least 1 year	1:1 mentor/youth ratio

Program objectives/goals:

Safety and security:	reduce the incidence of antisocial behaviors
Emotional support:	could improve relationships with parent and peers
Information and technical and academic skills:	improving motivation, attitude and achievement related to schoolwork
Social skills:	providing social, cultural and recreational enrichment improving peer relationships
Other:	improving self-concept

STUDY 1:
BBS1 Tierney, J.P., Grossman, J.B. & Resch, N.L. (1995). Making a difference: An impact study of Big Brothers/Big Sisters. Philadelphia: Public/Private Ventures.

Study objectives and measurements:
Objective
To assess whether the program reduced antisocial activities, improved academic performance, improved family and peer relationships, improved sense of self-esteem, increased cultural awareness

Measurement instrument
Baseline and 18 month follow-up survey of youth and parent
Records and data collected by program staff

Evaluation:
Type: Quantitative
Statistical techniques: Random assignment to treatment and control group
Population evaluated: 959 10-16 year olds who applied to BB/BS programs in 1992 and 1993 at eight local agencies

Outcome:
Evaluation participants who had participated in BB/BS were less likely to start using drugs or alcohol; were less likely to hit someone; had improved school attendance and performance; had improved attitudes toward completing schoolwork; and had improved peer and family relationships. They were not more likely to have an improved sense of self-esteem or increased exposure to cultural awareness. There were some differences in impacts according to race and gender.

Other information:
Services were provided for up to 17 months; the follow-up survey was conducted after 18 months.
Estimated costs are approximately $1,000 per match for support and supervision of match.
* BB/BS institutes an extensive case-management approach to mentoring.

STUDY 2:

BBS2 Morrow, K. V. & Styles, M. B. (1995). Building relationships with youth in program settings: A study of Big Brothers/Big Sisters. Philadelphia: Public/Private Ventures.

Study objectives and measurements:

Objective

To investigate the particular genre of adult/youth relationships that form under the BB/BS model

Measurement instrument

Semi-structured in-depth interviews conducted with participants at two points in time, nine months apart. Review of each pair's case files to obtain demographic and other information on the participantsObservations of agency and staff interviews regarding program practices and issues that arise in supervising pairs, when possible

Evaluation:

Type: Qualitative, with some quantitative description
Statistical techniques: None
Population evaluated: 82

Outcome:

One-on-one mentoring led to improvements in perceived scholastic competence. Students had fewer unexcused absences from school.

STUDY 3:

BBS3 Rhodes, J., Grossman, J., & Resch, N. (2000). Agents of change: Pathways through which mentoring relationships influence adolescents' academic adjustment. Child Development, 71, 1662-1671.

Study objectives and measurements:

Objective

To test a conceptual model of the pathways (specifically parent-child relationships) through which mentoring relationships influence adolescents' academic outcomes

Measurement instrument

See description for BBS1.

Evaluation:

Type: See description for BBS1.
Statistical techniques: Structural equation modeling; controls for baseline levels of outcomes
Population evaluated: See description for BBS1.

Outcome:

Improvements in parental relationships, reductions in unexcused absences and improvements in perceived scholastic competence. Direct effects of mentoring on global self-worth, school value, and grades were not detected but instead were mediated through improved parental relationships and scholastic competence.

STUDY 4:

BBS4 Furano, K., Roaf, P.A., Styles, M.B., & Branch, A.Y. (1993). Big Brothers/Big Sisters: A study of program practices. Philadelphia: Public/Private Ventures (P/PV).

Study objectives and measurements:

Objective

To determine whether the mandated elements of the BB/BS program are effective in facilitating meetings between youth and adults. Further, the study is designed to look at similarities and differences across gender, and between same-race and cross-race matches.

Measurement instrument

Comparisons are made between BB/BS agencies. Secondly, the BB/BS program is compared to three newer mentoring programs that Public/Private Ventures has studied.

Staff members at the BB/BS agencies were interviewed during the course of a weeklong visit, and focus groups were conducted with youth and parents and Big Brothers and Big Sisters. Public/Private Ventures staff also observed ongoing program activities.

Telephone interview of BB and BS was conducted to obtain data about the frequency, content, and duration of meetings between adults and youth.

Evaluation:

Type: Qualitative and quantitative

Statistical techniques: Descriptive chi-square tests and regression used to determine whether program practices contributed or hindered the rate of interaction between adults and youth

Population evaluated: Unit of analysis varies from program site to mentors

Outcome:

BB/BS programs stand out among mentoring programs in the longevity of the matches and in the frequency of meetings that occur between the adults and youth. At the study sites, the average length of a match was 28 months; the nationwide BB/BS average is one and one-half years. Mentors and mentees met an average of 3.1 times during the four-week study period. This effectiveness in length and frequency of interaction applies equally to various subgroups (e.g., cross-race matches).

Although not experimentally tested, P/PV's initial conclusion is that structure and support is precisely what is needed if mentoring is to play a key role in youth policy and programming. Professional BB/BS staff have responsibilities for making and supervising matches, recruiting, fundraising, and providing extra program services. Further, local agencies follow national BB/BS standards that provide for uniformity in recruitment, screening, training, matching, and supervision. BB/BS agencies take the youth's and parents' preferences into account when matching children and mentors.

STUDY 5:

BBS5 Grossman, Jean B. & Rhodes, Jean E. (1999). The test of time: Predictors and effects of duration in youth mentoring relationships. Unpublished manuscript.

Study objectives and measurements:

Objective

To assess the effects and predictors of duration in youth mentor relationships

Measurement instrument

See BBS1.

Evaluation:
Statistical techniques: Hazard Analysis

Population evaluated: See BBS1.

Outcome:
The following characteristics place matches at greater risk of breaking up: (1) adolescents who were referred for psychological or educational programs, or had sustained emotional, sexual, or physical abuse; (2) matches involving 13-16 year olds are 65% more likely to break up than matches involving 10-12 year olds; (3) matches involving lower income volunteers; (4) same-race minority matches compared with same-race white matches *except* in minority matches in which race was an explicit matching criteria; and (5) matches involving volunteer married persons 26-30 years old, who were 86% more likely to terminate their relationship each month compared with matches with 18-25 year old volunteers , and far more likely than non-married 26-30 year olds (who were *less* likely to terminate relationships relative to 18-25 year old volunteers). The negative effects of being a married volunteer 26-30 years old and being of lower income are due to the lower levels of youth-centeredness in these relationships. Considering that very short relationships have the potential to harm children, these findings suggest careful matching of mentors who have the available time to commit to mentoring. They also suggest supervision of the relationship to allow for problem-solving when conflicts do arise.

Other information:

PROGRAM: Building Essential Life Options Through New Goals (Project BELONG)

Population:
Population Served: 385 middle school students in the Bryan-College Station, Texas
Age Grades 5 - 8
Other characteristics: At risk youth were selected from five middle school campuses in the Bryan-College Station, Texas

Program components:

Component	Provided by	Duration	Description
Mentoring activities	Undergraduates	2 semesters 10 – 12 hours a week working with or on behalf of the youth	Required a full semester of mastery based training
Tutoring	Undergraduates	2 semesters	Helped with school work and time management
Instruction in life skills	Undergraduates	2 semesters	Discussions of behaviors skills; critical thinking skills, drug/alcohol use, etc.

Program objectives/goals:
Information and technical and academic skills: teach the necessary academic and personal skills to improve functioning within school

Other: alter the likelihood that they will use alcohol, tobacco, or other drugs

STUDY 1:
BLNG Blakely, C. H., Menon, R., & Jones, D. J. (1995), Project BELONG: Final Report. College Station, TX: Texas A&M University, Public Policy Research Institute.

Study objectives and measurements:
Objective
To determine the impact of the program on juvenile outcomes (youth contact with the juvenile system), classroom behavior, grades, and discipline infractions.

Measurement instrument
Interviews were conducted at intake, at termination of the intervention, and one year after termination
Information was collected from the youths teachers after termination of the mentoring program and the school district provided the youths school records at the beginning of the program and at the end of each semester
Information was collected on contacts with the county juvenile department for one year prior entry, during the intervention, and for year post intervention

Evaluation:
Type: experimental evaluation; Mentor group (n=206); control group (n=179)
Statistical techniques: ANCOVA
Population evaluated: 385 middle school students in the Bryan-College Station, Texas

Outcome:
Mentored youth were rated by their teachers as more engaged in the classroom than control group members. Mentored youth were viewed by their teachers as placing a greater value on school than the control group youth. Teachers were less likely to report behavior problems for mentored youth and school administrators were less likely to have mentored youth referred to them for a severe discipline problem. Mentored youth were less likely to be receiving failing grades in math, as compared to the control group. Mentored youth were less likely to commit a Class A-C Misdemeanor or felony and the seriousness of the offenses was less for the mentored youth than for the control group youth.

Other information:
Project funded by the US Department of Education

Program: THE BUDDY SYSTEM

Population:

Population Served: Multi-ethnic youngsters referred by schools, police, courts, social welfare agencies and community residents because of academic or behavioral problems.

Age: 10-17

Other Characteristics:

Program Components

Component	Provided by	Duration	Description
One-on-one Mentoring	Community Resident	Less than 1 year for most participants	Weekly meetings engaging in social activities; mentors trained to establish a warm trusting relationship AND create a plan to change targeted behaviors
Group mentoring	Community resident	Not available	When appropriate, mentors met with their mentees in group activities
Money	Program		Youth were given $10/month if their behaviors improved

Program Objectives/Goals:

Safety and security: Reduce problem behaviors

Social skills: Guide youth to engage in socially appropriate behaviors

Information and technical and academic knowledge: Improve problematic academic behaviors

Social support/interaction: Increase the number of skilled and experienced helpers (the mentors) in the community

Study 1:

Fo, W. S., & O'Donnell, C. R. (1975). The Buddy System: Effects of community intervention on delinquent offenses. Behavior Therapy, 6, 522-524.

Study objectives and measurements:

Objective: To determine the effects of the program on delinquent acts.

Measurement instrument: Records on the delinquent offenses of participants and control group.

Evaluation:

Type: Experimental, random assignment, treatment n=264 and control group n=178.

Statistical techniques: Z test, Significance Level=.05

Population evaluated: youth referred to program, treatment n=264 and control group n=178.

Outcome:

For youth who had committed major offenses in the year prior to entering the project, only 37.5% of the treatment group compared to 64% of the control group ($p < .04$) committed major offenses during the Buddy system year. For youths with no record of major offenses in the preceding year, a different pattern emerges: 15.7% of mentored youth compared to only 7.2% of control youth committed major offenses during the Buddy system year ($p<.02$).

Other Information:

Funding provided through HUD's model cities and HEW's office of Junvenile Delinquency and Youth Development.

Study 2:
O'Donnell, C. R., Lydgate, T., & Fo, W. S. (1979). The Buddy System: Review and follow-up. Child Behavior Therapy, 1, 161-169.

Study objectives and measurements:
Objective: To evaluate the effectiveness of the program based on the arrest data (for major offenses only) of participants over a three-year span.

Measurement instrument: Arrest records of participants and control group one year before participation, the year(s) of participation and two years after the initial year of participation.

Evaluation:
Type: Experimental

Statistical techniques: Two tailed Z Tests, Significance Level=.05

Population evaluated: 335 youths (206 boys and 129 girls) in the experimental group. 218 youths (151 boys and 67 girls) in the control group. In the experimental group 255 were in the program for one year, 73 for two years and 7 for three years. In the control group 195 were assigned to three years, 23 for two years and none for three years.

Outcome:
The Buddy system is most effective for youth who have been arrested for major offenses in the preceding year: 56% vs 78% ($p<.04$) were arrested for a major offense in the program year or 2 years after. Of youngsters without prior arrests, those in the treatment group were more likely to commit a major offense than those in the control group: 22.5% vs 16.4% ($p<.05$).

Other Information:

PROGRAM: CAREER BEGINNINGS

Population:
Population Served: 1,500 – 2,000 students annually, with 100-200 per site at 24 sites throughout the U.S. and Canada
Age: 11th and 12th grades
Other characteristics: Must meet thresholds of being at-risk but also showing potential for success in program: average academic achievers (C and D grades); low to moderate family income; limited career awareness and aspirations; not a serious juvenile offender, good attendance record. Sites must meet the following requirements: 50% economically disadvantaged; 80% neither parent with a college degree; 45% male.

Program components:

Component	Provided by	Duration	Description
Mentoring	Adults in community	2 years	1:1 mentor/student ratio
Academic support	Schools	2 years	Competency-based curriculum; workshops
Summer component/workforce training	Mentor	1 summer	Summer job provided after 11th grade

Program objectives/goals:

Information, technical and academic skills:	Increased high school graduation rates Increased college attendance or technical training rates Increased employment rates after high school

STUDY 1:
CB1 Cave, George & Quint, Janet (1990). Career Beginnings impact evaluation: Findings from a program for disadvantaged high school students. New York: Manpower Demonstration Research Corporation.

Study objectives and measurements:
Objective
To evaluate the effectiveness of the program in increasing rates of college attendance and employment.

Measurement instrument
Student interviews, conducted one and two years after random assignment (12th grade and one year after high school)

Evaluation:
Type: Qualitative and Quantitative
Statistical techniques: Random assignment in 11th grade; regression analysis
Population evaluated: 1,233 experimental and comparison group students in seven sites

Outcome:
Participants had fewer unexcused absences from school, and were more likely to attend college than controls. Program participants worked significantly less than the control group during the year after high school (attributed to greater percentage of program participants trading work for participation in higher education).

Other information:

PROGRAM: CAMPUS PARTNERS IN LEARNING

Population:
Population Served: 12 programs with 8-25 mentor/mentee matches, each
Age: 4th through 9th grades
Other characteristics: At-risk

Program components:

Component	Provided by	Duration	Description
Mentoring	College students	1 academic year	1:1 mentor/student ratio
Group activities	Organized by staff		Recreation activities, practical issues (e.g.,."pregnancy"), academic skill development, team building

Program objectives/goals:

Safety and security:	Reduced anti-social behaviors
Information and technical and academic skills:	Increased educational aspirations
	Improved academic performance
Social skills:	More exposure to cultural, social, & recreation activities
Other:	Improve self esteem
	Positive outcomes for mentors

STUDY 1:

CP1 Tierney, J. P. & Branch, A. (1992). College students as mentors for at-risk youth: A study of six Campus Partners in Learning programs. Philadelphia: Public/Private Ventures.

Study objectives and measurements:

Objectives

Answer the following questions specific to campus-based mentoring:

1. Will adequate numbers of college students volunteer to become mentors?
2. What kinds of relationships form between college students and at-risk youth?
3. What program practices make the most sense for college-based mentoring programs?
4. Does participation in college mentoring programs result in positive outcomes for the mentees? For the college students?

Measurement instrument

Data collected through the administration of baseline and follow-up questionnaires. Data collected on background and measures of attitudes, perceptions and behavior.

Evaluation:

Type: Qualitative and quantitative

Statistical techniques: Mainly inductive; descriptive, and change scores evaluated amongst small samples

Population evaluated: Varies depending upon question; from 12-55 matches

Outcome:

Students were exposed to additional social and cultural activities. Their locus of control significantly improved. There were no significant behavioral changes, changes in educational aspirations or global self-worth, or improvements in academic performance. Forty-five percent of the matches were deemed successful. For the mentors, there was significant improvement in self-esteem, they perceived themselves more academically competent, and they were satisfied with their social skills. There were no changes in communication skills, GPA, or sense that they could change the world.

PROGRAM: HOSPITAL YOUTH MENTORING PROGRAM

Population:
Population Served: 10 to 80 students per hospital, for a total of 515 students
Age: 14-22 (Age varies by hospital – some target middle school students; others target high school only.)
Other characteristics: At-risk for school failure; programs partnered with a local school or district

Program components:

Component	Provided by	Duration	Description
Mentoring*	Hospital employees	About 1 year	
Employment**	Hospital		Paid and unpaid
Academic skills**			
College preparation**			
Interface with schools**			

Program objectives/goals:
Information and technical and academic skills: To help at-risk students complete high school and move on to post-secondary education or employment

STUDY 1:
HP1 McClanahan, W. (1998). Relationships in a career mentoring program: Lessons learned from the Hospital Youth Mentoring Program. Philadelphia: Public/Private Ventures.

Study objectives and measurements:
Objective
To examine the nature and content of the relationships that developed between mentors and mentees involved in the HYMP.

Measurement instrument:
Phone interviews with HYMP program coordinators
A survey of students' and mentors' perceptions of their mentoring relationships
A review of historical program documents
Scales measuring time engaged in work activities, social activities, and preparatory activities

Evaluation:
Type: Qualitative and quantitative
Statistical techniques: Correlations
Population evaluated: 380 at-risk youth and their mentors from 13 different hospitals (73% were aged 16-18; others were both younger and older.)

Outcome:
Mentors in HYMP on average achieved all three components of a successful mentoring relationship: Students felt that their mentors considered their opinions, were flexible and caring, and were supportive. Mentors with more training have longer relationships with their mentees. Each hospital either adopted a mentoring model that focused on social activities, or a non-social approach in which youth spent most of their time on hospital work and hospital-based career development activities. Despite the approach, students and mentors in both models report giving and receiving a lot of career guidance in their mentoring relationships.

Other information:
*Some hospitals have mentors focus on social activities; others direct mentors to focus on career activities
**The presence of these activities varies by hospital.
Notes: Students had been participating in the program for about four and one-half years at the time of this study; about one-third had been participating for two or more years.
Twenty-three percent of the students had more than one mentor while in the program.

PROGRAM: LINKING LIFETIMES

Population:
Population Served: Number not known, but 4 programs surveyed
Age: 12-17 year olds
Other characteristics: at-risk youth across four sites, one serving young offenders, one serving teen mothers, and two serving middle school youth living in high-risk neighborhoods

Program components:

Component	Provided by	Duration	Description
Mentoring	Elders	Weekly, 4-10 hours	1:1 ratio (mentors paid)

Program objectives/goals:
Social skills: using elder mentors to help at-risk youth and young offenders become productive and self-reliant members of society

STUDY 1:
LL1 Styles, M., & Morrow, K. (1992). Understanding how youth and elders form relationships: A study of four Linking Lifetimes programs. Philadelphia: Public/Private Ventures.

Study objectives and measurements:
Objective
To identify characteristics of relationships facilitated by programs

Measurement:
Face-to-face semistructured interviews with adults and youth separately at four sites, at two points in time (nine months apart)

Evaluation:
Type: Qualitative
Statistical techniques: Not applicable
Population evaluated: 26 pairs of mentors and mentees

Outcomes:
Using a youth-driven approach to mentoring leads to more satisfactory and long-lasting relationships.

PROGRAM: MULTIPLE PROGRAMS

STUDY 1:

MP1 Grossman, J., & Johnson, A. (1999). Assessing the effectiveness of mentoring programs. In Grossman, J. (Ed.), Contemporary Issues in Mentoring (pp. 24-47). Philadelphia: Public/Private Ventures.

Sample Population:
Population Served: See descriptions for BBS1 and SAS1.
Age: See descriptions for BBS1 and SAS1.

Study objectives and measurements:
Objective
This study establishes benchmarks from the BB/BS and SAS data.

Measurement instrument
See descriptions for BBS1 and SAS1.

Evaluation:
Type: Quantitative; random experimental assignment for BB/BS data; quasi-experimental design for SAS data (see BBS1 and SAS1)

Statistical techniques: Regression analyses controlling for background characteristics
Population evaluated: See descriptions for BBS1 and SAS1

Outcome:
A large number of effects from the two programs were found for certain students or students in certain types of relationships and diminished for other groups. So, those who initially scored low in academic achievement, had high absentee rates, and had minimal family support experienced many improvements in academically related outcomes compared to those who were initially better off (those who initially scored low in academic achievement were also less likely to start using drugs). Students in long- lasting relationships, who have frequent contact with their mentor, or who are involved in youth-centered mentoring experienced many improvements in academic outcomes and less substance use compared with those in relationships of shorter duration, with less frequent contact or relationships characterized by low levels of youth-centeredness.

Other information:

STUDY 2:

MP2 Herrera, C., Sipe, C., & McClanahan, W. (2000). Mentoring school-age children: Relationship development in community-based and school-based programs. Philadelphia: Public/Private Ventures.

Sample Population:
N: 669 volunteers were interviewed.
Age: Wide-ranging, especially elementary school
Other characteristics: Only the mentors were interviewed; mentors were involved in one-on-one mentoring.

Study objectives and measurements:
Objective
Answer the following questions: Are mentors developing warm supportive relationships with children?
What is school-based mentoring?
Are enough mentors in school-based and community-based programs developing close supportive relationships with youth?
What are the benchmarks that programs should use?

Measurement instrument
All measures reflect the mentor's opinion only.
Used to find out what characteristics and practices matter to the mentoring relationships
Telephone survey of the 669 mentors involved in one-on-one relationships

Evaluation:
Type: Quantitative and qualitative
Statistical techniques: Descriptive and correlational
Population evaluated: 669 mentors who were in one-on-one matches

Outcome:
This study did not examine youth outcomes. The focus was to compare and contrast community and place-based mentoring. The two program models provide the same amount of prematch training and postmatch support to their mentors, although school-based programs tend to screen less rigorously than do community-based programs. Close, supportive relationships were developing in the majority of matches in both community and school-based programs, although more mentors in community-based programs reported feeling "very close" to their mentee. The following are important to fostering close, supportive mentoring relationships in both models of programs: pretraining and ongoing support and supervision; amount of time spent together; engaging in social and academic activities; allowing youth to contribute to decision-making; and ensuring that youth and mentors share similar interests.

Other information:
(Total sample = 1,101, but not all of these were in one-on-one mentoring relationships.)
This study does not assess the impact of mentoring on youth outcomes.

STUDY 3:
MP3 Mecartney, C., Styles, M., & Morrow, K., (1994). Mentoring in the juvenile justice system: Findings from two pilot programs. Philadelphia: Public/Private Ventures.

Sample Population:
N: 163 youth in two juvenile justice facilities; one in Atlanta, and one in St. Louis
Age: 11 to 18, mean age=15
Other characteristics: juvenile offenders, predominantly black males

Program components:

Component	Provided by	Duration	Description
Mentoring	Adults in community	< 3 mos. to 10 mos.*	1:1 mentor/youth ratio

Study objectives and measurements:
Objective
To answer the following questions:
- Can supportive adult relationships be made on a regular basis to large numbers of youth in programs that receive public funds?
- Will this addition to existing public services strain budgets and burden staff?
- Will the addition of mentoring increase the institution's benefits to youth?

Measurement instrument
Mentor logs, program records, agency records on youth, mentor application and interview, survey of mentors and youth (baseline and follow-up), staff interviews, focus groups with mentors and youth

Evaluation:
Type: Qualitative and quantitative
Statistical techniques: Summary percentages of demographic characteristics and frequency of contacts
Population evaluated: 163 youth and mentors

Outcome:
Twenty-six percent of the matches were considered sustained relationships; 33% of the relationships ended before the youth left the juvenile facility. No information was provided on changes in attitudes or behaviors.

Other information:
*Frequency of meetings varied; about 25% of the pairs met approximately twice per month, which was considered "regular." Other pairs met less frequently.

PROGRAM: Raising Ambition Instills Self-Esteem (RAISE)

Population:
Population Served: Approximately 60 students in each of seven communities in Baltimore
Age: 6th grade, following through for seven years
Other characteristics: At-risk

Program components:

Component	Provided by	Duration	Description
Mentoring*	Adults in community	7 years; at least 1 yr of contacts, w/ biweekly visits	1:1 mentor/student ratio
Academic support	School-based advocate	7 years	
Activities	Volunteers	7 years	Recreation trips, etc

Program objectives/goals:
Safety and security: Improved self-esteem and reduced high-risk behaviors
Information, technical and academic skills: Improved academic performance and improved attendance

STUDY 1:

R1 McPartland, J. & S. M. Nettles. (1991). Using community adults as advocates or mentors for at-risk middle school students: A two-year evaluation of project RAISE. American Journal of Education, 99(4), 568-586.

Study objectives and measurements:
Objective
To provide an empirical foundation (using comparison groups and statistical tests) for a discussion of programs that use adults from the community to assist the school success of at-risk youth

Measurement instrument
Absence rate for 1989-90 (second year); report card averages; achievement test scores in reading and math; promotion rates

Evaluation:
Type: Quantitative; experimental comparison group students at all seven sites
Statistical techniques: Regression analysis

Population evaluated: Approximately 60 students in each of seven communities in Baltimore

Outcome:
Participants had higher English grades than controls (though grades were still very low). Participants did not have significantly different GPAs, math grades, or standardized test scores than controls.
Participants had fewer unexcused absences from school than controls (equal to about one week of classes attended per year).

Other information:
* Two of the seven programs had no mentors; two programs had one-third of the students mentored; one program had one-half of the students mentored; and two programs had all students mentored.
Program outcomes are measured after two years of operation; students will receive an additional five years of intervention.

PROGRAM: SPONSOR-A-SCHOLAR

Population:
Population Served: Approximately 150 students (30 per class) from Philadelphia public high schools
Age: 9th grade (stay in program until first year of college)
Other characteristics: 75% Black, 10% Hispanic, 7% White, and 7% Asian
Student's parents must support program goals; program open to motivated, low-income students with average grades

Program components:

Component	Provided by	Duration	Description
Mentoring	Volunteers	4 years	1:1 ratio
Academic assistance	Academic coordinator	4 years	Academic assistance; help with college applications & financial aid
Interface with schools and others	Program		
Money	Volunteers, businesses	One-time	$6,000 for college

Program objectives/goals:

Information and technical and education skills:	Help students from Philadelphia public high schools stay in high school and enroll in college
Material Resources:	Some financial assistance for those who make it to college

STUDY 1:
SAS1 Johnson, A. (1999). Sponsor-A-Scholar: Long-term Impacts of a youth mentoring program on student performance. Princeton: Mathematica Policy Research, Inc.

Study objectives and measurements:
Objective:
To assess whether the program affects the academic performance of the students and to assess whether participation has a greater impact on certain types of students or on students in certain types of mentoring relationships

Measurement instrument:
GPA in 10th, 11th, and 12th grades; participation in college prep activities; self-esteem; college attendance in first and second years after high school graduation; college retention rate between first and second years of college. Students were surveyed during each of the four years of the evaluation through a self-administered questionnaire, and a telephone survey after they left school. Each mentor was surveyed once, during the student's senior year in high school. Information also collected from student transcript data, school districts, class coordinator's notebooks, and observations.

Evaluation:
Type: Quasi-experimental (matched-group)

Statistical techniques: Analyses control for background characteristics

Population evaluated: 434 (180 of whom participated in the program) high-risk high school students

Outcome:
Participants had higher GPAs in 10th and 11th grade than controls. Participants did not have significantly different 12th grade GPAs than controls. Participants were more likely than controls to attend college. Participants were engaged in more college preparatory activities than controls. Participants and controls did not differ significantly on self confidence or self esteem.

Other information:
Response rates: Year 1 (98%); Year 2 (99%); Year 3 (92%); Year 4 (95%)

Appendix B: Program Components Offered in Addition to Mentoring

Program	Other Components
Across Ages	School-based life-skills curriculum Community service learning Parenting workshops
Big Brother /Big Sisters	None **OR** Stand-alone mentoring
BELONG	Tutoring Life skills instruction
The Buddy System	Small group mentoring
Career Beginnings	Academic competency-based curriculum workshops Summer job Workforce training
Campus Partners in Learning	Group activities (Focus includes practical issues, academic issues, team building, and general recreation.)
Hospital Youth Mentoring Program	Academic skills College preparation Interface with schools Employment (Activities vary by site.)
Linking Lifetimes	None **OR** Stand-alone mentoring
Raising Ambition Instills Self-Esteem (RAISE)	Academic support Recreational activities
Sponsor A Scholar	Assistance with college applications Academic assistance Interface with schools Financial assistance for tuition

Program References

Across Ages

AA1 LoSciuto, L., Rajala, A., Townsend, T.N., & Taylor, A. S. (1996). An outcome evaluation of Across Ages: An intergenerational mentoring approach to drug prevention. Journal of Adolescent Research, 11(1), 116-129.

AA2 Aseltine, R., Dupre, M., & Lamlein, P. (2000). Mentoring as a drug prevention strategy: An evaluation of Across Ages. Adolescent and Family Health, 1, 11-20.

Big Brothers/Big Sisters Program*

BBS1 Tierney, J.P., Grossman, J.B. & Resch, N.L. (1995). Making a difference: An impact study of Big Brothers/Big Sisters. Philadelphia: Public/Private Ventures.

BBS2 Morrow, K. V., & Styles, M. B. (1995). Building Relationships with youth in program settings: A study of Big Brothers/Big Sisters. Philadelphia: Public/Private Ventures.

BBS3 Rhodes, J., Grossman, J., & Resch, N. (2000). Agents of change: Pathways through which mentoring relationships influence adolescents' academic adjustment. Child Development, 71, 1662-1671.

BBS4 Furano, K., Roaf, P.A., Styles, M.B., & Branch, A.Y. (1993). Big Brothers/Big Sisters: A study of program practices. Philadelphia: Public/Private Ventures.

BBS5 Grossman, J. B. & Rhodes, J. E. (1999). The test of time: Predictors and effects of duration in youth mentoring relationships. Unpublished manuscript.

*Big Brothers/Big Sisters is one of two programs examined in multiple programs listing 1.

The Buddy System

BS1 Fo, W. S. O. & O'Donnell, C. (1975). The Buddy System: Effect of community intervention on delinquent offenses. Behavior Therapy, 6: 522-524.

BS2 O'Donnell, C.R., Lydgate, T., and Fo, W.S.O. (1979). The Buddy System: Review and follow-up. Child Behavior Therapy, 1,2: 161-169.

Building Essential Life Options Through New Goals (BELONG)

BLNG Blakely, C. H., Menon, R., & Jones, D. J. (1995), Project BELONG: Final Report. College Station, TX: Texas A&M University, Public Policy Research Institute.

Career Beginnings

CB1 Cave, G., & Quint, J.. (1990). Career beginnings impact evaluations: Findings from a program for disadvantaged high school students. New York: Manpower Demonstration Research Corporation.

Campus Partners In Learning

CP1 Tierney, J. P. & Branch, A. (1992). College students as mentors for at-risk youth: A study of six Campus Partners in Learning programs. Philadelphia: Public/Private Ventures.

Hospital Youth Mentoring Program

HP1 McClanahan, W. (1998). Relationships in a career mentoring program: Lessons learned from the Hospital Youth Mentoring Program. Philadelphia: Public/Private Ventures.

Linking Lifetimes

LL1 Styles, M., & Morrow, K. (1992). Understanding how youth and elders form relationships: A study of four Linking Lifetimes programs. Philadelphia: Public/Private Ventures.

Multiple Programs

MP1 Grossman, J., & Johnson, A. (1999). Assessing the effectiveness of mentoring programs. In Grossman, J. (Ed.), Contemporary Issues in Mentoring (pp. 24-47). Philadelphia: Public/Private Ventures.

MP2 Herrera, C., Sipe, C., & McClanahan, W. (2000). Mentoring school-age children: Relationship development in community-based and school-based programs. Philadelphia: Public/Private Ventures.

MP3 Mecartney, C., Styles, M., & Morrow, K. (1994). Mentoring in the juvenile justice system: Findings from two pilot programs. Philadelphia: Public/Private Ventures.

Raising Ambition Instills Self-Esteem (RAISE)

R1 McPartland, J. & Nettles, S.M. (1991). Using community adults as advocates or mentors for at-risk middle school students: A two-year evaluation of project RAISE. American Journal of Education, 99(4), 568-586.

Sponsor-A-Scholar

SAS1 Johnson, A. (1999). Sponsor-A-Scholar: Long-term impacts of a youth mentoring program on student performance. Princeton: Mathematica Policy Research, Inc.

*Sponsor-A-Scholar is 1 of 2 programs examined in "multiple programs" listing #1

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Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. American Journal of Orthopsychiatry, 52, 664-676.

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Furstenberg, Frank (1993). How families manage risk and opportunity in dangerous neighborhoods. In William Julius Wilson (Ed.), Sociology and the Public Agenda (pp. 231-258). Newbury Park, CA:Sage.

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Rhodes, J., Ebert, L., & Fischer, K. (1992). Natural mentors: An overlooked resource in the social networks of young, African American mothers. American Journal of Community Psychology, 20(4), 445-461.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. American Journal of Orthopsychiatry, 57, 316-331.

Scales, P., & Gibbons, J. (1996). Extended family members and unrelated adults in the lives of young adolescents: A research agenda. Journal of Early Adolescence, 16(4), 365-389.

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Sipe, C.L. (1999). Mentoring adolescents: What have we learned?. In Grossman, J. (Ed.), Contemporary Issues in Mentoring (pp. 10-23). Philadelphia: Public/Private Ventures.

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[i] No Evaluation strategy has been identified that can approximate the results provided by a well-implemented random assignment experimental design (Hollister and Hill, 1995).

Over the past decade, a number of researchers have attempted to duplicate the results from experimental studies using a variety of other non-experimental approaches, with unsatisfying results. For example, experimental impacts comparing treatments with controls in one community were contrasted with estimates obtained by comparing the treatments in one community with the controls from another similar community (a common quasi-experimental approach) (Friedlander and Robins, 1994). Results indicate that the conclusions reached from the simulated quasi-experiment are substantively different from the conclusions based on data from the true experiment. Indeed, the direction of the effects as well as the magnitude of the effects differed for the quasi-experimental data.

Recently, several additional studies have attempted to replicate experimental results using other approaches. Again, there was "no consistent evidence that propensity score methods replicate experimental impacts" (Agodini and Dynarski, 2001, p. 38). In addition, they did not find regression methods to be any more helpful than the propensity score method; neither could replicate the experimental impacts. Similarly, Bloom, Hill and Michalopoulos (2001) found that their conclusions would be altered if experimental methods were abandoned, though the differences were greater when comparisons were drawn from different sites than when they were drawn from the same site. Moreover, they found that regression-adjusted comparisons were not preferable to unadjusted comparisons.

Therefore, we are committed to basing our conclusions about impacts on experimentally designed evaluations, because random assignment avoids problems of self-selection and thus selection bias into the treatment or the control group. Accordingly, it is the only methodology that can support causal conclusions about whether mentoring programs have a positive impact on youth outcomes.